TRANSCRIPT OF RECORD

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1894.

No. 137.

CYRUS F. PALMER, APPELLANT,

vs.

THE VILLAGE OF CORNING.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF NEW YORK.

FILED APRIL 27, 1894.

(14,595.)

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1 *Statement.*

United States Circuit Court, Northern District of New York.

CYRUS F. PALMER
vs.
VILLAGE OF CORNING. } In Equity. No. 5774.

The complainant in the above-entitled cause filed his bill of complaint against the defendant herein on the 18th day of April, 1889, which bill is hereto annexed.

A subpœna was thereupon issued and served on the defendant on the 22d day of April, 1889, which subpœna, with proof of service thereon, is hereto annexed.

On the 28th day of May, 1889, the defendant duly appeared by George T. Spencer as its solicitor, which appearance is hereto annexed.

On the 1st day of July, 1889, the defendant duly filed its answer to the complainant's said bill of complaint, which answer is hereto annexed.

On the 1st day of July, 1889, the complainant filed a replication to said answer, which replication is hereto annexed.

Testimony was thereafter taken by and on behalf of the respective parties and the said cause was duly brought to a hearing and argued by the solicitors of the respective parties before the Honorable William J. Wallace, at a term of this court held at Syracuse on the 21st day of November, 1890.

2 A decision was duly made by said court in favor of the defendant and filed herein on the 1st day of December, 1890.

That thereafter and on the 10th day of December, 1890, at a term of this court held at Syracuse—present, the Honorable William J. Wallace, judge—a final decree was duly made and entered in said cause, which final decree is hereto annexed.

3 *Bill of Complaint.*

United States Circuit Court for the Northern District of New York.
In Equity.

To the hon. judges of the United States circuit court in and for the northern district of New York:

Cyrus F. Palmer, of Utica, in the county of Oneida, and State of New York, brings this bill of complaint against the village of Corning, a municipal corporation existing under and by virtue of the laws of the State of New York, and located therein, as defendant in this suit, and thereupon your orator complains and shows:

1st. That prior to the 21st day of January, 1873, Henry W. Clapp, a citizen of the United States, and a resident of Concord, in the county of Merrimac, in the State of New Hampshire, was the original and first inventor and discoverer of a certain new and useful

improvement in grates for sewer inlets, not known or used by others before his invention thereof, and which was not and had not
4 been at the time of his application for letters patent therefor, in public use with the knowledge, consent or allowance of the said Henry W. Clapp, or on sale or in public use at all, as your orator verily believes and charges the truth to be.

2d. Your orator further shows, that the said Henry W. Clapp, being, as aforesaid, the inventor of said improvement in grates for sewer inlets, and being a citizen of the United States, made application to the Commissioner of Patents of the United States, for letters patent thereof, in accordance with existing laws of Congress, and having complied in all respects with the requirements and conditions of said laws, on the 21st day of January, 1873, letters patent of the United States, No. 134,978, duly signed by the Secretary of the Interior, countersigned by the Commissioner of Patents, and sealed with the official seal of the United States Patent Office in due form of law for said invention and discovery, were granted and issued to the aforesaid Henry W. Clapp, whereby were secured to him, his heirs, and assigns, for the term of seventeen years from the said 21st day of January, 1873, the full and exclusive right and liberty of making, using and vending to others to be used, the said invention and improvement, as by reference to said letters patent or a certified copy thereof, (here in court to be produced, if required,) will more fully appear.

3d. Your orator further shows, that for a valuable consideration to him paid, the said Henry W. Clapp, by an instrument in writing, duly executed in accordance with law, sold, assigned, transferred and conveyed to your orator, his heirs, executors, administrators and assigns, all his right in said invention as secured by said letters patent, for the counties of Jefferson, Lewis, Oneida, Madison, Chenango, Broome, Oswego, Cortland, Tioga, Tompkins, Cayuga, Onondaga, excepting the city of Syracuse, Chemung, Schuyler,
5 Seneca, Wayne, Ontario, Yates, Steuben, Allegany, Livingston, Monroe, Orleans, Genesee, Wyoming, Cattaraugus, Chautauqua, Erie, Niagara, in the State of New York, the said village of Corning being located within said territory, to the full end of the term for which said letters patent were granted, and all extensions thereof, in and to said letters patent No. 134,978, and which said instrument in writing was dated October, 1877, and was duly recorded in the Patent Office of the United States, as by reference to said assignment or a certified copy thereof, (here in court to be produced, if required,) will more fully appear.

4th. Your orator further shows, that the validity of said letters patent has uniformly been acknowledged, and numerous parties have paid royalty thereon, for a period of years next before the commencement of this action, and the public has generally acquiesced in the novelty and validity of said letters patent and of the invention therein set forth, and the same has been generally introduced throughout the United States, into public use, and has been found of great benefit to the public.

5th. And your orator further shows, that by virtue of the prem-

ises, he is now entitled to the sole and exclusive right, privilege, profits and advantages granted and secured by said letters patent No. 134,978, within the territory aforesaid, and is entitled to sue for, collect and receive, to his own use, all profits and damages arising out of the infringement of the said letters patent in the territory aforesaid.

6th. Your orator further shows, that the invention secured by said letters patent is of great value to the public. That, since the granting thereof, your orator has brought said invention into general use within said territory, and the same has been brought into public use elsewhere by the lawful owners of said patent, and your orator has been engaged in the manufacture and sale of said invention to the great benefit of the public and to the profit of your orator. And the wrongful acts of the defendant hereinafter mentioned, are calculated to and do deprive your orator of great gains and profits which they would otherwise have received but for the wrongful acts of the said defendant.

7th. Your orator further shows, that since the granting of said letters patent and the assignment of the territory aforesaid, and at divers times and on different occasions, between that time and the filing of this, your orator's bill of complaint, the said defendant, The Village of Corning, well knowing the premises, and — infringement of said letters patent and violation of the exclusive right of your orator within said territory, and without the license of and against the will of your orator, to wit: at the village of Corning, within said territory and State aforesaid, in the district aforesaid, made or caused to be made, sold or caused to be sold, used or caused to be used, upwards of one hundred and fifty grates for sewer inlets, embracing the same elements as set forth in said letters patent, and are still using and causing to be used a large number thereof, said improvement or discovery, the precise number now in use in said village of Corning, your orator is unable to state. Whereby great injury has resulted to your orator and great gains and profits have accrued to the said defendant, the full amount of which is unknown to your orator, but which in equity belong to him and should be accounted for by the said defendant and paid over to your orator as the avails of their exclusive right aforesaid, and the profits and gains which they would have otherwise derived therefrom, but for the unlawful acts of the defendants.

8th. Your orator further shows, that the said defendants have been informed of their infringement, but they wholly neglect and refuse to desist. That said unlawful acts of the defendants have the effect to encourage and induce other persons to infringe said patents, and the exclusive right of your orator thereunder in the said territory aforesaid, and he fears and has good reason to fear, that, unless the defendants be restrained by a writ of injunction issued out of this court, they will continue to make, use and to sell, or cause to be used, said improvement embraced in said patent, and will thereby create irreparable injury to your orator's exclusive right, as aforesaid.

9th. Your orator further prays your honors, to grant unto your

orator a preliminary and also a permanent writ of injunction, issued out of and under the seal of this honorable court, directed to the defendant, The Village of Corning, absolutely enjoining the said village of Corning, its agents, servants, employees, officers, attorneys and solicitors, not to make, use or sell, or cause to be made, used or sold, any grates for sewer inlets, or other apparatus containing or employing the invention covered by said letters patent within the territory aforesaid.

10th. And your orator further prays, that the defendant, by a decree of this court, may be compelled to account for and pay over to your orator, all the benefits which the defendants have derived or shall have derived from any use, or from making any specimen of the apparatus covered and secured by the said letters patent, and that defendant be decreed to pay all damages which your orator has incurred on account of the defendants' infringement of said letters patent, and that they be decreed to pay the costs of this suit, and that your orator may have such other and further relief, as the equity of the case or the statutes of the United States may require, and as to the court may seem just.

8 May it please your honors, to grant unto your orator the writ of injunction conformable to the prayer of this bill, and also a writ of subpœna of the United States, directed to the said defendant, The Village of Corning, commanding it to appear and answer this bill of complaint, and to state, under oath, the number of grates for sewer inlets embodying the invention set forth in the letters patent aforesaid, which are now in public use in said village, and to abide, stand to, and perform such orders and decrees in the premises as to the court may seem meet and be required by the principles of equity and conscience. And your orator will ever pray.

CYRUS F. PALMER,
Complainant.

RISLEY & PERRY,
Solicitors and of Counsel for the Complainant.

UNITED STATES OF AMERICA, }
Northern District of New York, County of Oneida, } ss:

On this 4th day of April, 1889, before me, a notary public in and for said county, personally appeared Cyrus F. Palmer, and made oath that he is complainant in said action, and that he has read the foregoing bill of complaint by him subscribed, and knows the contents thereof; that the same is true of his own knowledge, except as to the matters therein stated to be alleged upon information and belief, and as to those matters he believes it to be true.

CYRUS F. PALMER.

Subscribed and sworn to before me, this 4th day of April, 1889.

MILTON E. ROBINSON,
[L. S.] *Notary Public, Oneida County, N. Y.*

Indorsed: Bill of complaint. Risley & Perry, pl'ff's att'ys, Utica, N. Y. Filed Apr. 18, 1889. W. S. Doolittle, clerk.

9 (*Order for Subpœna.*)

In the Circuit Court of the United States for the Northern District of New York.

UTICA, *April* 18, 1889.

Present: The Honorable William J. Wallace, judge.

CYRUS F. PALMER *vs.* VILLAGE OF CORNING. } In Equity. No. 5774.

On filing bill of complaint in this cause and on motion of Risley & Perry, complainant's solicitors, it is—

Ordered that a writ of subpœna do issue out of and under the seal of this court pursuant to the prayer of said bill, and that this cause be docketed for said complainant.

10 *Writ of Subpœna.*

The President of the United States of America to Village of Corning, Greeting:

You are hereby commanded that you personally appear before the judges of the circuit court of the United States for the [L. S.] northern district of New York, in the second circuit, on the first Monday in June, 1889, to answer to a bill of complaint exhibited against you in said court by Cyrus F. Palmer and to do further and receive whatever said court shall have considered in that behalf; and this you are not to omit under the penalty of two hundred and fifty dollars.

Witness the Honorable Melville W. Fuller, Chief Justice of the Supreme Court of the United States, at the city of Utica, in said northern district, the 18th day of April, eighteen hundred and eighty-nine.

W. S. DOOLITTLE, *Clerk.*

RISLEY & PERRY,
Solicitors for Complainant.

MEMORANDUM.—The defendant is to enter his appearance in the suit above mentioned in the clerk's office, at Utica, on or before the day at which the above subpœna is returnable; otherwise the bill may be taken *pro confesso.*

W. S. DOOLITTLE, *Clerk.*

11 UNITED STATES OF AMERICA, *Northern District of New York,* } *ss:*

I hereby certify that on the 22d day of April, 1889, at Corning, in my district, I personally served the within writ of subpœna on the within-named defendant by delivering a true copy thereof to Thomas

Dwyer, the treasurer of said defendant, by showing the same to him, with the seal of the court thereon, and at the same time delivering to and leaving with him, said Thomas Dwyer, a true copy thereof.

WALTER H. BUNN,
U. S. Marshal,
By DE WITT STARING, *Deputy.*

160 miles' travel, at 6 ct. per mile	9 60
One service	2 00
	$11 60

(Indorsed:) Equity subpœna. Filed Apr. 23, 1889. W. S. Doolittle, clerk.

12 *Appearance.*

United States Circuit Court, Northern District of New York.

CYRUS F. PALMER
vs.
VILLAGE OF CORNING. } No. 5774. In Equity.

The clerk of this court will please enter my appearances as solicitor for the defendant in the above-entitled cause.

Yours, &c.; GEO. T. SPENCER,
Solicitor for Defendant, Village of Corning.

Dated May 27, 1889.

(Indorsed:) Precept for appearance. Filed May 28, 1889. W. S. Doolittle, clerk.

13 *Order.*

In the Circuit Court of the United States for the Northern District of New York.

UTICA, *May* 28, 1889.

Present: The Honorable William J. Wallace, judge.

CYRUS F. PALMER
vs.
VILLAGE OF CORNING. } In Equity. No. 5774.

On filing præcipe in this cause and on motion of George T. Spencer—

Ordered that his appearance as solicitor for the defendant herein be, and the same is hereby, entered, and that this cause be now docketed for said defendant.

14 *Answer.*

United States Circuit Court for the Northern District of New York.

CYRUS F. PALMER
vs.
THE VILLAGE OF CORNING. } In Equity.

The answer of The Village of Corning, defendant, to the bill of complaint of Cyrus F. Palmer, complainant.

The defendant now and at all times hereafter saving and reserving to itself all and all manner of benefit and advantage of exception to the many errors and insufficiencies in the complainant's said bill of complaint contained, for answer thereunto, or unto so much or such parts thereof as this defendant is advised is material for him to make answer unto, answers and says:

15 The defendant admits that it is a municipal corporation existing under and by virtue of the laws of the State of New York and located therein and within the territory specified in said bill of complaint.

And defendant denies, on information and belief, that prior to the 21st of January, 1873, or at any other time, Henry W. Clapp was the original and first inventor and discoverer of a new and useful improvement in grates for sewer inlets, not known or used by others before his invention thereof, and defendant has no knowledge that letters patent of the United States were at any time granted and issued to the aforesaid Henry W. Clapp for such alleged invention and discovery, as stated in said bill of complaint.

And defendant further says that it has no knowledge whether said Henry W. Clapp, by an instrument in writing duly executed according with law, or otherwise, transferred and conveyed to complainant all his right in said alleged invention as secured by said letters patent for the counties in the State of New York named in said bill of complaint.

And defendant denies, on information and belief, that the validity of said letters patent has been uniformly acknowledged, or that the public has generally acquiesced in the novelty and validity of said letters patent and of the invention therein set forth or that the same has been generally introduced throughout the United States, or has been found of great or any benefit to the public, and defendant has no knowledge, information or belief that numerous parties have paid royalty thereon.

And defendant denies, on information and belief, that said alleged invention secured by said letters patent is of great or any value to the public, or that since the granting thereof com-

16 plainant has brought the same into general use in said territory; and defendant says that it has no knowledge, information or belief that the same has been brought into public use elsewhere by the lawful owners of said patent, or that complainant has been engaged in the manufacture and sale of said alleged in-

vention, to the great benefit of the public or the profit of complainant or otherwise.

And defendant denies that it at any time made or caused to be made, or sold or caused to be sold, or used or caused to be used, one hundred and fifty or any other number of grates for sewer inlets embracing the same elements as set forth in said alleged letters patent, or is still using or causing to be used a large or any number thereof, or that great or any gains or profits have accrued to defendant thereby, or that any such gains or profits belonged to complainant.

And defendant, on information and belief, says that at the time of the alleged invention and discovery of said Henry W. Clapp of the improvement in grates for sewer inlets and the granting and issuing of said letters patent therefor, said alleged improvement was not invention, that the same was not new and the same was and is substantially identical with numerous devices which were at that time old and which were and had been in common, general and notorious use as well for sewer inlets as for other purposes for many years.

And defendant further answering, on information and belief, says, that the letters patent mentioned and referred to in said bill of complaint are invalid and void, in this, that the same purport to be granted for a new and useful improvement in grates for sewer inlets, and does not specify wherein such improvement consists, and in this, that said letters patent do not specify what is new in the grates for sewer inlets, for which such letters patents were granted. And also
17 in this, that the claim specified in said letters patent embraces all and all forms of grates for sewer inlets, and contains no disclaimer of any part thereof not invented or discovered by the patentee, nor has said patentee at any time prior to the commencement of this suit filed in the Patent Office any such disclaimer.

Defendant admits that there are in use in the village of Corning grates for sewer inlets to the number of one hundred and twenty-six, but defendant has no knowledge or information that the same embodied the invention set forth in the letters patent referred to in the bill of complaint, and defendant says that said sewer inlets so in use were not made or used by said village, but were procured and were and are used by the board of sewer commissioners of the village of Corning under and by virtue of an act of the legislature of the State of New York passed April 5, 1886, by which said board of sewer commissioners were created, and whereby it was provided that said commissioners should have the exclusive power and authority to adopt plans for and construct a system of sewerage throughout the streets and alleys of the village of Corning, and have the maintenance and management thereof; and whereby it was further provided, that all contracts for works and materials for the construction and repairs of the sewers should be made by and in the name of the board of sewer commissioners, and the grates for sewer inlets in use in said village, as hereinbefore stated, were furnished and provided, and have been and are used under contracts made for

the construction of sewers in said streets and alleys, with said sewer commissioners, and under their exclusive direction and control, and have been and are used under such exclusive direction and control, and without any direction, control or permission of defendant, and defendant has at no time had or now has any control, power or authority in any way to prevent or interfere with the use of said grates for sewer inlets, or control over the same.

18 All which matters and things defendant is ready to aver, maintain and prove as this honorable court shall direct, and hereby prays hence to be dismissed with its reasonable costs and charges in this behalf sustained.

In witness whereof, the defendant, The Village of Corning, [L. S.] has hereto affixed its corporate seal and caused the same to be attested by John W. Fedder, its president.

JOHN W. FEDDER,
President of the Village of Corning. [L. S.]

GEO. T. SPENCER,
Solicitor and Counsel for Defendant.

STATE OF NEW YORK, }
County of Steuben, } *ss:*

On this 29th day of June, A. D. 1889, before me, a notary public in and for said county, personally appeared John W. Fedder, and made oath that he is president of The Village of Corning, defendant in the above action; that he has heard read the foregoing answer by him subscribed and knows the contents thereof; that the same is true, of his own knowledge except as to the matters therein stated to be alleged on information and belief, and that as to those matters he believes it to be true.

JOHN W. FEDDER.

Subscribed and sworn to this 29th day of June, 1889, before me—
E. D. MILLS,
[L. S.] *Notary Public.*

Indorsed: Answer. Filed July 1, 1889. W. S. Doolittle, clerk.

19 *Replication.*

Circuit Court of the United States for the Northern District of New York.

CYRUS F. PALMER
vs.
THE VILLAGE OF CORNING. } In Equity.

This repliant, saving and reserving unto himself all and all manner of advantage of exception to the manifold insufficiencies of the said answer, for replication thereunto saith, that he will aver and prove his said bill to be true, certain, and sufficient in the law to be answered unto; and that the said answer of the said defend-

ant is uncertain, untrue, and insufficient to be answered unto by this repliant; without this, that any other matter or thing whatsoever in the said answer contained, material or effectual in the law to be replied to, confessed and avoided, traversed or denied, is true; all of which matters and things this repliant is and will be ready to aver and prove, as this honorable court shall direct and humbly prays, as in and by his said bill he hath already prayed.

RISLEY & PERRY,
Solicitors for the Complainant.

(Indorsed:) Replication. Filed July 1, 1889. W. S. Doolittle, clerk.

20 *Minutes.*

At a stated term of the circuit court of the United States of America for the northern district of New York, in the second circuit, held at the U. S. court-house, in the city of Syracuse, on the 21st day of November, A. D. 1890.

Present: The Honorable William J. Wallace, judge.

CYRUS F. PALMER
vs.
THE VILLAGE OF CORNING. } In Equity. No. 5774.

Argument on Final Hearing.

Mr. Edwin H. Risley, counsel for complainant, is heard for complainant.

Mr. G. T. Spencer, of counsel, is heard for defendant.

Court takes papers.

Decision reserved.

21 *Final Decree.*

At a term of the circuit court of the United States of America for the northern district of New York, in the second circuit, held at the U. S. court-house, in the city of Syracuse, on the 10th day of December, A. D. 1890.

Present: The Honorable William J. Wallace, judge.

CYRUS F. PALMER
vs.
THE VILLAGE OF CORNING. } No. 5774.

This cause having come on to be heard on the pleadings and proofs, and having been argued by counsel for the respective parties, and the same having been duly considered, it is ordered, adjudged, and decreed that complainant's bill of complaint herein be, and the same is hereby, dismissed with costs to the defendant, to be taxed.

WM. J. WALLACE.

(Indorsed:) Final decree. Filed Dec. 10, 1890. W. S. Doolittle, clerk.

22 And the costs having been taxed by the clerk at one hundred and four $\frac{90}{100}$ dollars, the process, pleadings, and decrees, together with other papers filed in said cause, are duly annexed hereunto.

Wherefore let the said defendant, The Village of Corning, recover of said complainant, Cyrus F. Palmer, the sum of one hundred and four $\frac{90}{100}$ dollars.

Signed and enrolled, pursuant to the rules and practice of this court, this seventeenth day of December, A. D. 1890, at four o'clock in the afternoon.

W. S. DOOLITTLE, *Clerk.*

(Indorsement on cover:) In equity. No. 5774. United States circuit court, northern district of New York. Cyrus F. Palmer *vs.* The Village of Corning. Final record. Geo. T. Spencer, defendant's solicitor. Costs of defendant, $104.90. Filed and entered the 17 day of Dec'r, 1890, at 4 p. m. W. S. Doolittle, clerk.

23 COMPLAINANT'S TESTIMONY.

Stipulation.

United States Circuit Court, Northern District of New York.

CYRUS F. PALMER
vs.
THE VILLAGE OF CORNING. } In Equity.

It is hereby stipulated and agreed, that the proofs on both sides be taken before any notary authorized and empowered to act, upon the usual notice in equity cases in the U. S. circuit court, and that such evidence be taken down by questions and answers by the notary before whom the same is taken, subject to all objections raised thereto, in conformity with the equity rule in such cases made and provided, and that either party may put in evidence any official printed copy of patents, with the same force and effect as if the same was duly certified, subject to such other and further explanation or proof as either party may wish to give in relation thereto.

It is further stipulated, that the complainant may have forty days from the date of this stipulation, in which to close his *prima facie* proof, and the defendants may have the like time to submit the proof in their defence, and the plaintiff may have twenty days in which to reply.

July 3, 1889.

RISLEY & PERRY,
Complainant's Solicitors.
GEO. T. SPENCER,
Defendant's Solicitor.

24 *Notice.*

United States Circuit Court.

CYRUS F. PALMER
vs.
THE VILLAGE OF CORNING.

Please to take notice, that the complainant will proceed to take his evidence before Milton E. Robinson, Esq., a notary public, or some other officer duly authorized to take the evidence under the stipulation heretofore made, at the law office of Risley & Perry, Herald building, Utica, N. Y., on the 9th day of September, 1889, at 10 o'clock in the forenoon, and will continue to take the proof of such witnesses as may be offered on the part of the complainant, in pursuance of the stipulation heretofore made, and will continue such examination from time to time until the completion thereof.

Yours, etc.,
RISLEY & PERRY,
Solicitors for the Complainant.

To George C. Spencer, solicitor for the defendant, Corning, N. Y.

August 21, 1889.

25 *Evidence-in-chief.*

U. S. Circuit Court, Northern District of New York.

CYRUS W. PALMER
vs.
THE VILLAGE OF CORNING.

Testimony taken and proceedings had in the above-entitled action on behalf of the complainant pursuant to the annexed stipulation, dated July 3, 1888, signed by the respective solicitors of the same, being taken in pursuance of notice dated Aug. 21, 1889, at the law office of Messrs. Risley & Perry, Herald building, Utica, N. Y., before George E. Dennison, a notary public in and for Oneida county.

Appearances: Edwin H. Risley, for the complainant, and George T. Spencer, for the defendant.

Counsel for the complainant offers in evidence a regular printed Patent Office copy of U. S. patents, No. 134,978, dated January 21, 1873, to H. W. Clapp, for an improvement in sewer inlets.

Objected to by defendant's counsel, as not properly or sufficiently authenticated.

Received and marked "Clapp's patent, Sept. 9, 1889."

Complainant's counsel next offered in evidence, a regular printed Patent Office copy of U.S. letters patent, No. 149,373, granted April 7, 1874, to W. H. Clapp, for an improvement in grating for sewer inlets.

26 Objected to on the ground that it is immaterial, irrelevant, and is not the patent set forth in the complainant's bill of complaint.

Offer withdrawn.

The complainant's counsel next offered in evidence on behalf of the complainant, an assignment of the above patent, on the 8th day of October, 1877, to this plaintiff, transferring a territorial interest in the patent. Recorded Oct. 18, 1877, in the U. S. Patent Office, in Liber 21, L. 21, p. 440.

Defendant's counsel objects on the grounds that the assignment is not sufficiently or properly proved, and purports to be executed by the attorney of Henry W. Clapp, who is not proved to have authority to execute the assignment as attorney and also that the same does not purport to transfer any interest in the patent in the territory in which the village of Corning is situated, and also that the certificate of recording is not sufficiently and properly authenticated.

Received and marked "Assignment of patent, Sept. 9, 1889."

The complainant's counsel next offers in evidence a copy of the power of attorney, executed by Henry W. Clapp to George W. Wales, empowering him to sell certain territorial interests in the patent in controversy. Recorded on the 18th day of October, 1877, in the U. S. Patent Office.

Defendant's counsel objects on the grounds that there is no proof of its execution, and that it does not authorize the assignment in evidence.

Received and marked "Exhibit Power of Attorney, Sept. 9, 1889."

27 The complainant's counsel next offers in evidence a search of Patent Office, duly certified on the 20th day of October, 1877, with reference to letters patent No. 134,978.

Defendant's counsel objects on the grounds that it is immaterial and is not competent evidence to prove an assignment of a patent or of the recording of the same, and is incompetent for any purpose, and not properly authenticated.

Received and marked "Exhibit Patent Office Search, Sept. 9. 1889."

CYRUS F. PALMER, called as a witness on behalf of the complainant, being first duly sworn in answer to the interrogatories propounded to him, testifies as follows:

Q. 1. Please state your name, age, residence and occupation.

A. 1. Cyrus F. Palmer, age 59, residence, Utica, N. Y., occupation founder and machinist.

Q. 2. Are you acquainted with the Henry W. Clapp named as patentee in the patent in controversy in this suit?

A. 2. Not personally. The acquaintance I have was through his agent, Mr. Wales, with whom I negotiated for the purchase of his letters patent.

Q. 3. What steps, if any, did you take towards manufacturing and introducing to the trade, grating for sewer inlets embraced in

the patent in controversy, and in this connection please state what you did and the extent of your manufacture and the extent of their use by your permission, in the territory embraced in your assignment.

Defendant's counsel objects to the evidence called for as immaterial, irrelevant and incompetent.

28 A. 3. Immediately after the purchase of letters patent I had patterns made for the manufacture of these grates and offered them for sale, both here and in the western part of the State, and the territory purchased. I did not meet with much success in the sale of the grates, except in and about Utica, at first. My sales in this immediate territory are about 150 a year; this is about the number that has been sold during the last three years. Before that, I sold from ten to twenty a year.

Defendant's counsel objects further to the evidence as given in answer to the last question on the ground that it is incompetent for the purpose of showing that the complainant has suffered any damage, or that he is entitled to any account from the defendant.

Q. 4. What business have you been engaged in for the past ten years and where have you conducted such business?

Defendant's counsel objects that the question is immaterial.

A. 4. As founder and machinist, in the city of Utica.

Q. 5. Is a part of the business carried on by you, that of manufacturing and selling sewer wells and grates?

A. 5. It is.

Q. 6. What grate do you employ and use in connection with the sewer wells that you manufacture and sell?

A. 6. The grate patented to Clapp, under the patent in controversy.

Q. 7. Are you familiar with the construction and operation of the grate set forth and mentioned in the patent in controversy in this action, and do you understand the construction and operation of the same?

A. 7. I am.

Q. 8. Do you manufacture sewer wells and grates to order, or are they carried in stock by your house?

29 A. 8. Both.

Q. 9. During the past three or four years, has your business in this line increased or decreased, and if either, state in about what proportion?

Defendant's counsel objects to question on the ground that it is immaterial, irrelevant and incompetent.

A. 9. Been about the same each year, for the last three years.

Q. 10. What part did you take, if any, in constructing patterns for the grate embraced in the patent in controversy and when manufacturing grates from the patterns?

Defendant's counsel objects to question as immaterial, irrelevant and incompetent.

A. 10. The part I took is in making the drawings, and directing the men in making the patterns, and I directed casting to be made from the patterns.

Q. 11. Please describe the construction and operation of the grate mentioned in the patent in controversy?

Defendant's counsel objects to the evidence as immaterial, irrelevant and incompetent, and that the construction must be determined by the specifications of the patent.

A. 11. The shape of the grate is preferably round and the top of the grate is slotted or perforated and to receive the flow of water, the upper portion of which stands upon pins or is elevated above the opening, so that it will not become obstructed by sticks, straws, leaves, small rubbish, not large enough to clog the sewer or drain, which it may be connected with, and at the same time it will stop all large matter that might do injury to the drain; this improvement can be attached to any form of grating, round or square, and consists in a cast-iron ring made to fit the collar which surrounds the opening to hold the grate in place. We use the pins or uprights preferably of wrought iron for strength, these pins are cast in both of the grates, holding them together, making it in one piece, and elevating one above the other enough for a free passage between the ring and the grate; this form of grate, when receiving a great flow of water, will hold the debris above the grate on top of the water, thus preventing the clogging of the grates and the greater part of the rubbish from passing into the sewer.

Defendant's counsel further objects to the above evidence that it calls for an operation of the grate in question which is not embraced in the specifications of the patent.

Q. 12. In your understanding of the grate embraced in the patent in controversy, that the grate, the rings and the elevating pins or supports may be all cast in one piece?

Defendant's counsel objects on the same grounds as to the last previous question.

A. 12. It may be.

Q. 13. Please state your understanding of the claim embraced in the patent in suit, and specify the elements which enter into it.

Defendant's counsel objects to the above evidence on the ground that all that must be determined by the specifications of the patent, and that it is not for the witness to give a construction to the patent.

A. 13. It consists in a base ring with pins cast in between the upper grate and the base and the grate.

There are three elements combined in this grate: the upper portion or grate; the pins beneath the grate; the lower ring or base.

Q. 14. Would you consider, with reference to this claim,
31 that the pins of wrought iron cast into the base ring, and the grate, were the equivalents of a support formed of cast iron connecting the base ring and the grate?

Defendant's counsel objects to above question that it is not the subject of an opinion.

A. 14. They are one and the same. The wrought iron being one and the same, and used only for superior strength.

Q. 15. Do you know where the village of Corning is situated in this State?

A. 15. I do. In Steuben county, in this State.

Q. 16. Were you in Corning at any time; if so, when?

A. 16. I was there this last July.

Q. 17. Did you examine to ascertain whether the village had employed and used grates embracing the elements which you have mentioned as involved in the patent in controversy? And if so, explain what you saw in use in Corning.

Defendant's counsel objects to that part of the question which assumes or attempts to prove that the village employed or used the grates referred to in the question.

A. 17. July last I was at the village of Corning; I saw sewer caps or grating supported on pins with a base ring, embracing all the elements of the H. W. Clapp patent. I saw them in the streets of Corning, but as to the names of the streets I do not know them.

Defendant's counsel objects to that part of the answer which embraces all the elements of the H. W. Clapp patent.

Q. 18. How many grates did you see covering sewer inlets in the village of Corning, in the streets?

A. 18. I do not know the exact number; I passed fifty or sixty.

32 Q. 19. Please state whether the fifty or sixty sewer grates which you saw in Corning covered sewer inlets or wells which receive the surface or street drainage and where the grates were located, with reference to the surfaces of the streets.

A. 19. They did cover sewer wells sunk in the ground and located at the sides of the streets or street gutters, on a level with the surface of the gutter; in a manner to receive the surface drainage.

Q. 20. Have you since then made a model illustrating the construction and operation of the grates which you saw in use in the village of Corning?

A. 20. I have.

Q. 21. Complainant's counsel produced model and asks witness whether this is the model, and whether it illustrates the style of grate which he saw in the village of Corning.

A. 21. This is the model, and represents the grate, as near as I can remember it.

Model offered in evidence, and marked "Model of defendant's grate, Sept. 9, 1889."

Q. 22. Did you see in use over the inlets of the sewer well in Corning, styles of grates different from the one here produced in their mechanical outlines?

A. 22. I did.

Q. 23. In what respect did they differ from the model here produced?

A. 23. Only in the surface perforations of the grate. The elongated perforations in one were towards the center, while in the other they were straight across.

Q. 24. Have you a model illustrating the construction of the style of grate last described?

A. 24. I have.

33 Q. 25. Complain-t's counsel here produces model, and asks the witness whether this correctly illustrates the grate to which he refers.

A. 25. It does.

Model produced, and marked, "Defendant's alleged infringement grate, Sept. 9, 1889."

Q. 25. Please point out what elements you found in the grates in use over the sewer wells, in the village of Corning and whether they are the same as you find in the patent in controversy in question.

Defendant's counsel objects to the above question on the ground that the elements must be found in the description given, and the models produced, and it is not competent for the witness to characterize the same.

A. 25. I find both caps or grates perforated to receive the water, supported by pins and an under base ring, comprising the same elements in each, leaving a water-course or opening between the grate and the base ring. They are the same elements which I find in the claim of the patent in controversy.

Q. 26. Were the grates which you saw in use in the village of Corning, provided and used in the ordinary way over the sewer wells, to accommodate the street water in village?

A. 26. They were.

Cross-examination:

X Q. 27. In what places embraced in your assignment have grates constructed according to the Clapp patent been used?

X A. 27. Elmira, Waverly, Corning, Utica, these are the only places I can swear to.

X Q. 28. Were those used in Elmira furnished by you or under a license?

34 X A. 28. Neither one of them.

X Q. 29. Were those used in Waverly furnished by you or under a license from you?

X A. 29. Neither one.

X Q. 30. Is Utica the only place in which you furnished the grates or licensed their use in your territory?

X A. 30. It is.

X Q. 31. Do you know the extent to which the Clapp grates have been used in the city of Syracuse?

X A. 31. I do not.

X Q. 32. Do you claim for the Clapp patent the horizontal opening for the passage of water, made by elevating the grate above the ring upon which it rests on the pins?

X A. 32. Yes, sir.

X Q. 33. Do you not know that horizontal openings for the passage of water from gutters into sewers had been in use long before the date of the Clapp patent?

X A. 33. I do not.

X Q. 34. Did you never observe, in the city of New York, horizontal openings in the curb for the passage of water from the gutter into the sewer?

X A. 34. I did not.

X Q. 35. Have you observed, in the city of Syracuse, between South Salina street, between the railroad and the canal, a horizontal opening at the curb, for the passage of water from the gutter to the sewer?

X A. 35. I have not.

X Q. 36. Does it make any difference in the operation of a grate, whether a horizontal opening is above or below a vertical opening? In any case?

X A. 36. I think it does.

35 X Q. 37. What difference?

X A. 37. In one case it would receive the water either from the curb or gutter, while in the other the debris and the sand would have to fill in in height of the bottom of the opening.

X Q. 39. And would not the accumulation of the debris upon the vertical grate have precisely the same effect in allowing the passage of water through the hori-tal grate as the accumulation of debris against the horizontal opening in the Clapp patent would have in throwing the water through the vertical opening?

X A. 39. I think not.

Redirect by complainant's counsel:

R. X Q. 40. You answered the 31st X Q. in which you claim the horizontal opening for the passage of water made by elevating the grate; do you mean by that, that you claim the combination of elements that produce that result?

R. X A. 40. Yes, sir, I do.

Recross-examination:

R. X Q. 41. What is the combination you claim?

R. X A. 41. As hereinbefore described, the top grate supported by the pins on the lower base ring.

R. X Q. 42. And do you claim that the combination you have

referred to, produces the horizontal opening for the admission of water from the gutter into the sewer?

R. X A. 42. I do.

CYRUS F. PALMER.

GEORGE W. PRESTON, called as a witness on behalf of the complainant, being first duly sworn in answer to the interrogatories proposed to him, testifies as follows:

Q. 1. What is your name, age, residence and occupation?

36 A. 1. George W. Preston, aged 63, residence Corning, N. Y., occupation founder and machinist.

Q. 2. How many years have you resided in Corning?

A. 2. Since 1841.

Q. 3. Is there such a place as the village of Corning?

A. 3. There is.

Q. 4. About how many population does it contain?

A. 4. About 9,000, as estimated.

Q. 5. Is there sewers provided in some of the streets of the village?

A. 5. There is.

Q. 6. Is there sewer wells or openings into the sewers provided also?

A. 6. There is.

Q. 7. Are the tops of the wells covered by grates, on substantially the same horizontal level with the surfaces of the gutters?

A. 7. They are.

Q. 8. State the number of grates used in the village, if you know.

A. 8. I do not know the number.

Q. 9. Model of defendant's grate, Sept. 9, 1889, G. E. D., shown to the witness, and he is asked whether that model fairly represents some of the grates in use in Corning village.

A. 9. I think it does, very nearly.

Q. 10. Are the grates in use in the village of Corning, supported upon pins or supports which connect the grate and the base

37 ring beneath the grate in such manner as to form a space between the grate and the base ring?

A. 10. They are.

Q. 11. Are there grates now in use in Corning which were in use last spring, like model, "defendant's alleged infringement grate, Sept. 9, 1889?

A. 11. There are.

Q. 12. Do you know whether people living in Corning having houses along the line of the sewers in the streets use the sewers for draining their property, more or less?

Defendant's counsel objects to above question as immaterial, irrelevant and incompetent.

A. 12. I know they do.

Q. 13. Is the surface water of the streets of Corning discharged through these grates into the sewer?

A. 13. It is.

Q. 14. Did your firm manufacture the grates which are used in Corning?

A. 14. Some of the grates we did. We manufactured the grates illustrated in "model of defendant's grate, Sept. 9, 1889, G. E. D."

GEORGE W. PRESTON.

It is consented by both parties that the exhibits, models and evidence be kept by the respective parties and not filed till within ten days of final hearing.

The complainant here closed his proofs.

STATE OF NEW YORK, } ss:
County of Oneida, }

I, George E. Dennison, a notary public in and for the State of New York, duly commissioned, do hereby certify that the
38 foregoing evidence in the case of Cyrus F. Palmer *vs.* The Village of Corning, in the circuit court of the United States for the northern district of New York, was taken before me at the law office of Messrs. Risley & Perry, in pursuance of a stipulation, dated July 3d, 1889, entered into by the parties, at Utica, N. Y., and that the evidence so taken before me, on the 9th day of Sept., 1889, in pursuance of notice, was read over and subscribed by the witnesses in my presence, and that the foregoing is the whole of such evidence, and a complete record of the proceedings had before me, and that I have no interest in this case, and am not associated in business with either or any of the parties hereto, or of their counsel or solicitors.

Sept. 9, 1889.

GEO. E. DENNISON,
Notary Public, Oneida County, N. Y.

Complainant's Rebuttal Evidence.

U. S. Circuit Court, N. D. of New York.

CYRUS F. PALMER
vs.
THE VILLAGE OF CORNING.

Evidence taken in pursuance of notice on behalf of the complainant in rebuttal, at the law office of Matteson & Harvey, at Utica, N. Y., the 25th day of April, 1890, before W. K. Harvey, a notary public.

Edwin H. Risley appeared for the complainant.
George D. Spencer appeared for the defendant.

MILTON E. ROBINSON, called on behalf of the complainant, being duly sworn, testified as follows:

1 Q. What is your name, age and residence?
39 A. Milton E. Robinson, 28 years, Holland Patent, N. Y.
2 Q. Please state what experience you have had in patent

cases and what opportunity you have had to familiarize yourself with mechanical constructions and with patent specifications and drawings, forming part of letters patent for mechanical and other devices.

A. I have been familiar with mechanical constructions as long as I can remember, and worked with tools and machinery, and built machinery, and now have, and use occasionally, tools and machinery. I have had experience and investigated patents to a large extent, during the last three years. I have drawn hundreds of applications for patents on mechanical devices, and have prepared, or supervised the preparation of the drawings in connection therewith, and have examined thousands of patents cited as references and otherwise.

3 Q. Have you examined and do you understand the improvement shown, described and claimed in U. S. letters patent granted to H. W. Platt, January 21, 1873, number 134,978, for an improvement in sewer grates?

A. Yes, I have, and believe that I understand the patent and improvements therein shown and claimed.

4 Q. Please state what, in your opinion, the invention consists of, as shown and described in the patent in suit.

Objected to by defendant's counsel, on the ground that that must appear in the specification and claim of the patent itself; and that it is incompetent.

A. The invention described in the patent referred to relates to grates for sewer inlets and my understanding of the invention is that it consists in a ring, illustrated in the patent as ring *a* and a grate supported above the ring, with pins or supports interposed between the upper surface of the ring and the under side of the grate, so that the grate, when supported, in this position, is elevated above the ring, and forms a covering for the catch-basin or sewer inlet, over which the grate is constructed and arranged to be placed, and of course it is obvious that this construction of grate is arranged to be placed over a catch-basin or sewer inlet arranged to conduct the surface water from the street into the sewer and such catch-basin or sewer inlets are usually placed at the intersection of streets, but this of course would not be necessary. It can be placed anywhere in the gutters to allow the passage of the water into the sewer. The grate is provided for admitting the water with floating substances therein, which will pass through the sewer and not form an obstruction, and at the same time, the grate should be so arranged as to prevent substances which will clog the sewer, should they be admitted into it, and to keep the same from floating into the catch-basin and sewer and thus obstructing the free movement of the water through it. The invention illustrated and described in the specifications is admirably adapted to this end, by employing the base ring *a*, which supports pin *b*, and each in turn supports the grate and frees the water passage, which is formed between the grate and the base ring, which will allow the passage of smaller floating substances, and at the same time exclude larger ones. And

if the rush of water is sufficient in volume to cover the upper surface of the grate, it is permitted to pass freely through the grate, as well as between the grate and the base ring, and these currents of water flowing into the sewer, one current being horizontal and the other vertical, keep the grate free from being clogged or stopped with the smaller floating substances, which would be the case if the grate was placed on the base ring, without interposing pins, or was placed over the top of the catch-basins, as in that event,
41 in order for the water to flow through the grate, it would have to run on its upper surface, and in doing so, the floating smaller particles which ought to have been admitted into the sewer and carried off by the current, lodges on top, and sand, gravel and floating substances will almost immediately check and stop the flow of water through a grate, when it is admitted into the top. It was to overcome this trouble, which is the common experience in the use of all grates laid over catch-basins, on a level with the street or gutter, that this invention was made, and according to my opinion and observation of the use of these grates, they are well adapted to prevent this trouble, and the invention set forth in the specifications is designed and arranged to elevate the grate above the opening which it covers, a suitable distance, so that it will not be obstructed by small sticks, straws and leaves, and other small rubbish, not large enough to clog the sewer or drain with which it may be connected, and at the same time will stop the movement of all material which is sufficiently large to clog the sewer or drain, should it be admitted.

The patent sets forth that the cast-iron ring, made to fit the collar which surrounds the opening to hold the grate in place, in which cast or wrought iron pins are inserted or cast, and on the upper ends of these supports or pins the grate is fastened and elevated a sufficient distance, having reference to the size of the sewer and the opening required. It may be here remarked, that the pins may be made of wrought iron fitted to holes drilled in the grate and in the base ring; or the grate and ring, and pins for elevating the grate may be cast and formed in one piece. Another feature of the invention consists in having the grate and ring removable from the flange on which the base ring rests. By the construction before mentioned, a horizontal space is left, through which the
42 leaves, straw and other floating substances may pass with the water, and the grate by this operation, will be kept clear for the passage of water into the sewer; points of great practical value in a sewer grate. The claim of the patents are summed up and embrace the following elements, in combination: the base ring, the supporting pins and the elevated grate arranged above the pins and base ring, supported by the pins.

Defendant's counsel objects to the answer on the ground that it is broader than the specification and claim of the patent.

5 Q. Have you had an opportunity of examining the practical operation of grates, constructed in accordance with the letters patent in suit; if so, please state the extent of your observation.

A. For about four years I have had an opportunity to see the operation of grates constructed in conformity with the patent in suit. Such a grate is on the corner opposite the front window of the office which I have occupied for upward of four years, and I have had during that time repeated opportunities to see the practical operation of the grate. On several occasions, during violent rain storms, in the city of Utica, I have seen the water run down in the gutter in large quantities to the sewer inlet, covered with a grate of the construction before mentioned, and as the water approached the grate, it moved around the grate in a whirlpool and the larger floating sticks moved out to the periphery of the circulating water, while the water rushed into the space between the base ring and the grate with great velocity, and on several occasions I have seen a quantity of water, sufficient to cover not only the space between the grate and the base ring, but to cover the grate itself, where the whirlpool would continue; and after the water had subsided, I have noticed the grate, and without exception they
43 have been left clean and free from rubbish or debris, which would accumulate on a level or flat grate and utterly obstruct the water from flowing into the sewer.

Defendant's counsel objects to all that part of the answer following the words "before mentioned" on the ground that it embraces results not claimed in the specifications, or claim of the patent.

Defendant's counsel makes a further objection to that part of the answer to question 4, from and including the words, "that this invention was made, and according to my opinion" to and including the word "admitted" at the end of the sentence, on the ground that the patent in question is not properly the subject of an opinion.

Adjourned to 10 a. m., April 26, 1890.

Appearances same as before.

MILTON E. ROBINSON continued:

6 Q. Mr. Robinson, are you familiar with racks employed in flumes for preventing the floating of substances in the water onto water wheels—what might be termed flume racks?

A. I am. I have made them and seen lots of them.

7 Q. Do you see anything in the employment of racks placed in a flume through which water passes onto a wheel, assuming that such racks were employed and well known, long prior to the patent in suit, an anticipation of novelty in the device, described and illustrated in the patent in suit?

Defendant's counsel objects to the question upon the ground that the subject is not a proper one for the opinion of the witness, and that it is not for him to make the comparison.

A. I do not see that such a rack is an anticipation of the
44 device shown and claimed in the patent. It does not embrace the elements shown and claimed in the patent; that is, the base ring, the supporting pins and the elevated grating; nor

does the rack mentioned in the question perform the same functions in substantially the same manner as the device shown in the patent, and the combination claimed.

Defendant's counsel objects to all that part of the answer which is not directly responsive to the question.

8 Q. Assume that an opening was made for the passage of water in the bottom of the flume, to admit the water onto the wheel, and surrounding the opening, was a circular movable casing or curb arranged to be hoisted and lowered, performing the same functions of a grate with iron rack, inside of the curb of the size of its inner diameter, with iron rods extending across, for preventing floating substances from getting onto the wheel, the rack being provided with openings for the passage of water; assuming that such a device was employed prior to the date of the application for the patent in suit, and which had been used for more than two years prior to such application, would it, in your opinion, be an anticipation of the patent, and if so, state your reasons for this opinion.

Defendant's counsel objects to the question upon the ground that it is not a proper subject for an opinion.

A. It would not. The device described does not embrace the combination of elements claimed in the patent, nor does it perform the same office or function as the device shown and claimed in the patent, in substantially the same way. The claim of the patent embraces a ring, for which there is no substitute or equivalent in the device described, an elevated grating and pins for supporting the grating, none of which are found in the device described in the question.

45 Cross-examined:

1 X Q. What is your business?

A. I have been in the law and patent business for the last four years, or about that.

2 X Q. Have you had either education or experience with patents involving the science of hydraulics?

A. I have given some attention to the subject of hydraulics as a science, and am familiar with many of the principles of hydraulics. I have had experience in setting up water wheels and similar devices run by water and am familiar with hydraulic principles as applied to plumbing.

3 X Q. Is that the only answer you can make to the last previous question?

A. I do not know that I can make any other general answer. I might perhaps answer farther, by having my attention called specifically to subjects.

4 X Q. Have you ever seen a sewer grate with a horizontal opening for the passage of water, aside from the one embraced in this patent?

A. As I understand a horizontal opening, you mean that it is a opening from the side, as the space spanned by the pins in the

patent in suit. I have seen a sewer inlet with such an opening, but not grate. I have also seen illustrated in books or drawings such inlet openings with grates, that is with vertical grate bars spanning the horizontal opening. These, however, were only on one side or a portion of the periphery of the sewer opening. The grating I mean, is what may be termed a curb grating. I have seen the described inlet openings in Washington, and I think in New York city.

5 X Q. Are you aware that in the common tea-pot there are horizontal openings to prevent the passage of tea leaves into the spout?

46 A. I am aware that strainers are placed over the opening into the spout of a tea-pot. How far they are horizontal openings I am unable to say; or how far the horizontal opening will prevent the passage of tea leaves into the spout, I am unable to say.

6 X Q. In the practical operation of the grate mentioned by you in your answer to Q. 5, what became of the larger sticks which moved around the circulating water, as specified by you?

A. The most of them, as I remember, were left on the pavement at the outer edge of the whirlpool or circle of water around *and* grating.

7 X Q. And what caused the circulating water or whirlpool around the grating?

A. I should say, the peculiar construction of the grating, perhaps taken in connection with direction or manner in which the water came to it.

8 X Q. When did you first observe the operation of the grate referred to in your answer to your direct question, No. 5?

A. I should say, three or four years ago.

9 X Q. And was the operation which you have described confined to the occasions when there was a heavy flow of water?

A. No, I have seen it under both heavy and light flow.

10 X Q. Was the operation the same in both cases?

A. When there was water enough to surround the grate and enter the opening from all sides, the operation was the same as when there was water enough to cover the grate, so far as the whirlpool motion was concerned, as far as I was able to see.

11 X Q. Did you ever observe the operations of a grate with
47 only vertical openings, under the like circumstances as those described by you in your answer to direct question No. 5?

A. If you mean a grate over an inlet, the grate being in line with the surrounding surface, and closing the opening except from above, I have.

12 X Q. In that case, did you observe any large floating sticks approach the grate, and what became of them?

A. I have seen sticks as large and long as broom-sticks go down openings, covered by horizontal grate bars.

13 X Q. Did you ever see any other result in regard to floating sticks approaching such a grate?

A. If the sticks were of larger diameter than the distance between

the grate bars, or if they came to the grate crosswise, instead of endwise, they would lodge on the grate.

14 X Q. Do you mean by that, that that is what you observed, or is it only your theory?

A. It is what I have seen.

15 X Q. In the case mentioned by you, in your answer to question 5, what prevented the flow of water directly into the horizontal opening of the grate, instead of forming a whirlpool around it?

A. Nothing did prevent it, so far as I could see, and the water did flow in without a whirlpool, until there was a sufficient quantity of water to surround the grate and enter from all sides.

16 X Q. What difference does it make whether the water is admitted through a horizontal or a vertical opening as to its operation in arresting obstructions?

A. My observation is that debris, and especially paper,
48 straw and shavings, and similar things, will accumulate on a horizontal grate more readily than a vertical one. If the grates are of the same mesh, one will, of course, catch any obstruction that the other will, but the horizontal grate will become obstructed first. By a horizontal grate, I mean one level and even with the surface, or substantially so, and would probably be the same grate that counsel means, by "vertical openings."

17 X Q. Does not the effect produced depend more upon the larger horizontal or lateral opening in the grate in question, than in the vertical opening?

A. I cannot say either way from my observation, because I have never seen devices constructed as the question implies.

18 X Q. If the grate were constructed with only vertical openings, having the outer ones of greater relative size than the others, would it not produce the same results as having lateral openings the same size as such outer ones?

A. No.

19 X Q. Why not?

A. Because, on obstructions coming to the sewer, they have got to change their direction of movement to get into the sewer, and because one would produce the whirlpool movement and the other would not. By "obstructions coming to the sewer," I mean of course, those of suitable size to enter.

20 X Q. Is it not true that the grate in question does not produce any new result, but only the old in a little better manner?

A. I think it produces a new result, for it provides a grate that will keep itself clean and free from all obstructions, which the old grates do not do.

21 X Q. How are the mill racks referred to by you in your answer to direct question No. 6, constructed?

49 A. Of parallel slats, secured at the upper and lower ends to cross-bars, and often with center braces, and the racks are placed vertically or at an angle, and extend from the bottom of the flume to a foot or more above its surface of the water.

22 X Q. Is not the operation of such a rack to arrest floating sub-

stances on the water and prevent their passage into the flume or race?

A. It is—that is, they act as a strainer.

23 X Q. Did you ever see the device described in direct question 8?

A. I never did see the device; question 8 is an assumed one.

24 X Q. Have you been much employed as an expert witness in patent cases?

A. I have been sworn a number of times as an expert in patent cases.

Redirect examination:

1 Re-D. Q. Please state whether or not surface water flowing onto a sewer grate, in which are floating substances, where the grate is provided with vertical openings, with its upper surface on substantially the same horizontal plane with the surface of the gutter, so that the water containing the floating substances flows onto the surface of the grate and then drops vertically into the sewer opening; whether or not, the effect of this movement on the floating substance too large to pass into the openings in the grate, is not to draw the floating substances onto the surface of the grate, and hold them in that position, thereby obstructing the openings by the accumulation held on the surface of the grate by the water?

A. Yes.

50 Recross-examination:

1 Re-X Q. Would not the same result be produced in case the lateral openings in the grate in question were made small enough to arrest the smaller floating substances usually floating in gutters?

A. I do not believe the result would be the same, for there are two directions of current. Of course, if the openings were made fine like a sieve, it might produce the same result.

MILTON E. ROBINSON.

The foregoing evidence was read over, subscribed and sworn to by the witness.

W. K. HARVEY,
Notary Public, Oneida Co., N. Y.

The complainant here closed his proof.

I, Wm. K. Harvey, a notary public in and for Oneida county, N. Y., duly commissioned and qualified to act as such, do hereby certify that the foregoing evidence was taken before me at my office at the times therein set forth, and that the evidence so taken was carefully read over to the witness, and subscribed by him and the foregoing is all the evidence and proceedings had before me herein, and that the same is in all respects, true and correct.

I do further certify that I am not of counsel for either of the parties in the case, nor in anywise interested in the event of said

cause, or connected with either of the parties or witnesses in the case.

In witness whereof I have hereunto affixed my hand this 30th day of April, 1890.

W. K. HARVEY,
Notary Public, Oneida Co., N. Y.

51 STATE OF NEW YORK, } ss:
Oneida County Clerk's Office, }

I, Frederick D. Haak, clerk of said county, and of the supreme and county courts therein, the same being courts of record, do hereby certify, that W. K. Harvey, whose name is subscribed to the certificate to the proof or acknowledgment of the annexed instrument, and thereon written, was at the time of taking such proof or acknowledgment, a notary public for said county, dwelling in said county, and sworn and duly authorized to take the same. And further, that I am well acquainted with his handwriting, and verily believe that the signature to the certificate of said proof or acknowledgment is genuine. And further, that said instrument is executed and acknowledged according to the laws of the State of New York.

In testimony whereof, I have hereunto set my hand and
[L. S.] affixed the seal of said county and courts, at the city of Utica, this 2nd day of May, 1890.

F. D. HAAK, *Clerk.*

(Indorsed:) Complainant's record. Filed Nov. 17, 1890. W. S. Doolittle, clerk.

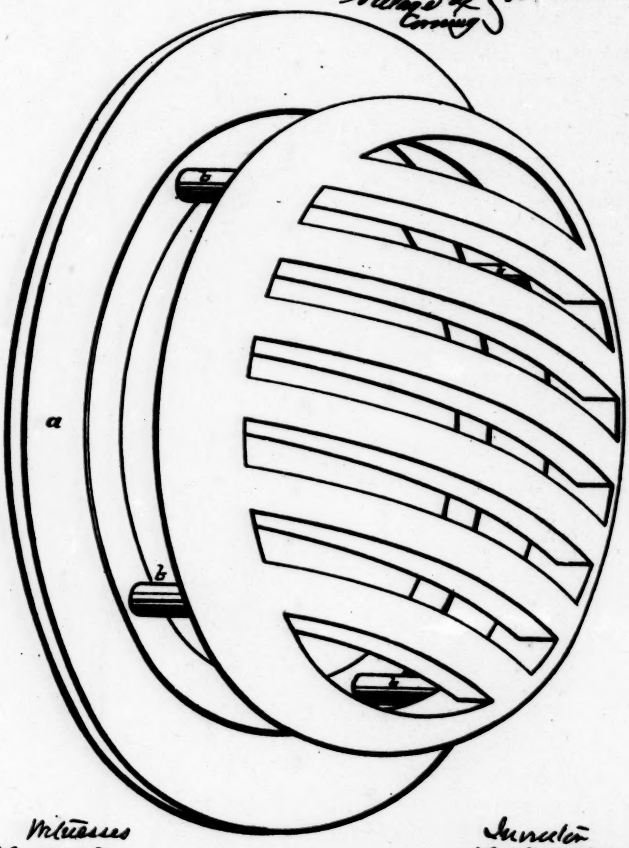
Complainant's Exhibits

H. W. CLAPP.

Gratings for Sewer Inlets.

No. 134,978. Patented Jan. 21, 1873.

No. 137 Palmer et Village of Emmy } H. 52



Witnesses
Chas. C. Lund
T. C. Hastings

Inventor
Henry W. Clapp

53 UNITED STATES PATENT OFFICE.

HENRY W. CLAPP, of Concord, New Hampshire.

Improvement in Gratings for Sewer-inlets.

Specification forming part of Letters Patent No. 134,978, dated January 21, 1873.

To all whom it may concern:

Be it known that I, Henry W. Clapp, of Concord, in the county of Merrimack and State of New Hampshire, have invented certain improvements in gratings for catch-basins and sewers; and for the purpose of enabling others to use my invention I will describe the same, referring to the accompanying drawing and the letters of reference marked thereon.

(Here follows diagram marked p. 52.)

My improvement consists in the employment of a device to elevate the grating above the opening which it covers a short distance, so that it will not become obstructed by small sticks, straws, leaves, and other small rubbish not large enough to clog the sewer or drain with which it may be connected, and at the same time will stop all matter large enough to do injury in said drain.

My improvement may be attached to any form of grating, round or square; and consists of a cast-iron ring made to fit the collar which surrounds the opening to hold the grate in place, marked *a* in the drawing, in which I set the cast or wrought iron pins, marked *b* in the drawing, to which the grating is firmly attached, and by means of which the grating may be elevated one to two inches, more or less, as may be desirable. These pins may be of wrought-iron fitted to holes drilled in the grate and ring; or the grate, ring, and pins for elevating the grate may be cast all in one piece; or wrought-iron pins may be cast into the ring and grate when they are cast.

The whole grating and ring may be taken out as desired, as easily as if they were not furnished with the supporting-ring; and my improvement may be used with a wood or iron collar, as may be desired.

By thus elevating the grate a space is left, through which leaves, straws, small sticks will pass freely, and the grate will be kept clear for the passage of water.

I claim—

The grating for sewer-openings herein described, consisting of the ring *a*, supporting-pins *b*, and elevated grating, substantially as specified.

HENRY W. CLAPP.

Witnesses:
CHAS. C. LUND.
V. C. HASTINGS.

(Indorsed:) No. 4. Clapp patent, Sept. 9, 1889. G. E. D.

54 "EX. POWER OF ATTORNEY. Sept. 9, '89. G. E. D."

Know all men by these presents, that I, Henry W. Clapp, of Concord, in the county of Merrimack and State of New Hampshire, have constituted and appointed, and do by these presents constitute and appoint George W. Wales, of said Concord, my true and lawful attorney, for me and in my name, place and stead, to sell and convey to such person or persons, and for such price or prices, and on such terms as he may see fit, all my right, title and interest within and for the State of New York, but not elsewhere, in certain letters patent of the United States, for improvements in stench traps and gratings for sewer inlets, viz: one numbered 134,978, dated January 21, 1873, one numbered 149,373, dated April 7, 1874, and one numbered 189,549, dated April 17, 1877, as said letters patent were granted and issued unto me, meaning and intending hereby that the purchaser or purchasers to whom said Wales shall convey, shall have, hold and enjoy, and fully exercise all the rights and privileges which said letters patent confer upon me within such territory in the State of New York as said Wales may designate in his conveyance.

55 I further empower said Wales to receive the purchase price therefor, and ratify and confirm all that my said attorney may lawfully do by virtue thereof.

Witness my hand and seal at said Concord, this 5th day of October, 1877.

HENRY W. CLAPP. [L. S.]

In presence of—
CHAS. C. LUND.
CHAS. O. FOSS.

Received for record October 18, 1877, and recorded in Liber C 22, page 61, of Transfers of Patents.

[L. S.] In testimony whereof, I have caused the seal of the Patent Office to be hereunto affixed.

W. H. DOOLITTLE,
Acting Commissioner,
Per P. E. W.

Ex'd: F. C. T.

Whereas, I, Henry W. Clapp, of Concord, in the county of Merrimack and State of New Hampshire, did obtain letters patent of the United States, for an improvement in gratings for sewer inlets, which letters patent bear date the 21st day of January, A. D. 1873, and are numbered 134,978; also, like letters patent for an improvement in gratings for sewer inlets, which last-mentioned letters patent bear date April 7th, A. D. 1874, and number 149,373; also, like letters patent for an improvement in stench traps for catch-basins and sewers, which last-mentioned letters patent bear date April 17th, A. D. 1877, and number 189,549.

And whereas, Cyrus F. Palmer, of the city of Utica, county of

Oneida, and State of New York, is desirous of acquiring an interest in each and every of said letters patent and improvements.

56 Now, this instrument witnesseth, that for and in consideration of one dollar to me in hand paid, the receipt whereof is hereby acknowledged, and other good and valuable considerations me thereunto moving, I have granted, sold, assigned and set over, and do hereby grant, sell, assign and set over unto the said Cyrus F. Palmer, his executors, administrators and assigns, all my right, title, property and interest in the said inventions and improvements, and in each and every of them, as secured to me by said letters patent, and each and every of them, for, to and in the following enumerated counties of the State of New York, viz., Jefferson, Lewis, Oneida, Madison, Chenango, Broome, Oswego, Cortland, Tioga, Tompkins, Cayuga, Onondaga, (excepting and reserving the city of Syracuse,) Chemung, Schuyler, Seneca, Wayne, Ontario, Yates, Steuben, Allegany, Livingston, Monroe, Orleans, Genesee, Wyoming, Cattaraugus, Chautauqua, Erie, and Niagara, and in no other place or places; to have and to hold the same unto the said Palmer, his executors, administrators and assigns, to and for his and their own use and behoof to the full end of the term for which said letters patent are granted, and for the term of any and all extensions thereof, and of either or any of them, as fully and entirely as the same would have been held and enjoyed by me had this grant, assignment and sale not been made.

And I do hereby covenant and agree to and with said Palmer, his executors, administrators and assigns, that I have good right and title to the said letters patent and each and every of them, and have good right, power and authority to convey the same in manner aforesaid, and that the same are free and clear of any liens, incumbrances and licenses of every name and nature.

Witness my hand and seal, this 8th day of October, A. D. 1877.

HENRY W. CLAPP. [L. S.]
GEORGE W. WALES,
His Attorney-in-fact.

57 STATE OF NEW YORK, }
Oneida County, } ss:

On this 8th day of October, A. D. 1877, before me personally came George W. Wales, the attorney of Henry W. Clapp, to me known and known to me to be the individual described in and who, as such attorney, executed the above instrument, and acknowledged that he executed the same as the act and deed of the said Henry W. Clapp, and for the purposes therein mentioned.

GEORGE C. MOREHOUSE,
Notary Public, Oneida County, N. Y.

Received for record October 18th, 1877, and recorded in Liber L 21, page 440, of Transfers of Patents.

[L. S.] In testimony whereof I have caused the seal of the Patent Office to be hereunto affixed.

W. H. DOOLITTLE,
Acting Commissioner,
Per P. E. W.

(Ex'd: F. C. T.)

STATE OF NEW YORK, } ss:
Oneida County Clerk's Office, }

I, Taliesin Evans, clerk of said county, and of the supreme and county courts therein, the same being courts of record, do hereby certify, that George C. Morehouse, whose name is subscribed to the certificate of the proof or acknowledgment of the annexed instrument, and thereon written, was, at the time of taking such proof or acknowledgment, a notary public for said county, dwelling in said county, and sworn and duly authorized to take the same. And further, that I am well acquainted with his handwriting, and
58 verily believe that the signature to the certificate of said proof or acknowledgment is genuine. And further, that said instrument is executed and acknowledged according to the laws of the State of New York.

In witness whereof, I have hereunto set my hand and
[L. S.] affixed the seal of said county and courts, at the city of Utica, this 8th day of October, 1877.

TALIESIN EVANS, *Clerk.*

The U. S. Patent Office.

To all persons to whom these presents shall come, Greeting:

This is to certify, that the annexed is a true copy from the digest of this office of all assignments, agreements, licenses, powers of attorney, and other instruments of writing, found of record under or relating to letters patent granted to Henry W. Clapp, No. 134,978, January 21, 1873, No. 149,373 April 7, 1874, for "grating for sewer inlets," and No. 189,549 April 17, 1877, "stench traps for catch-basins and sewers."

In testimony whereof, I, W. H. Doolittle, acting Commissioner of Patents, have caused the seal of the Patent Office to be here-
[L. S.] unto affixed, this twentieth day of October, in the year of our Lord one thousand eight hundred and seventy-seven, and of the Independence of the United States the one hundred and second.

W. H. DOOLITTLE,
Acting Commissioner.

Fee, $1.50. Pd.

Assignors.	Assignees.	Date of assignment.	Date of record.	Invention.	Territory assigned.
Henry W. Clapp....	George W. Wales, of Concord, N.H.	Oct. 5, '77	Oct. 18, '77	Gratings for sewer inlets January 21, '73, 134,978, and April 7, '74, 149,373, and stench traps for catch-basins and sewers April 17, '77, 189,549.	Power of attorney to sell and convey all his right in said letters patent for the State of New York.
Henry W. Clapp, George H. Wales, his attorney-in-fact.	Cyrus F. Palmer, of Utica, N. Y.	Oct. 8, '77	Oct. 18, '77	" " "	All his right in said inventions as secured by said letters patent for the counties of Jefferson, Lewis, Oneida, Madison, Chenango, Broome, Oswego, Cortland, Tioga, Tompkins, Cayuga, Onondaga, excepting the city of Syracuse, Chemung, Schuyler, Seneca, Wayne, Ontario, Yates, Steuben, Allegany, Livingston, Monroe, Orleans, Genesee, Wyoming, Cattaraugus, Chautauqua, Erie, and Niagara, in the State of New York, to the full end of the terms for which said letters patent are granted and all extensions thereof.

60 *Defendant's Testimony.*

United States Circuit Court for the Northern District of New York.

CYRUS F. PALMER
ag'st
THE VILLAGE OF CORNING. } Evidence Taken Oct. 16, 1889.

Testimony taken and proceedings had in the above-entitled action on behalf of the defendant pursuant to the annexed stipulation, dated July 3d, 1889, signed by the respective solicitors, the same being taken in pursuance of a notice dated September 28th, 1889, at the law office of Spencer & Mills, at Corning, Steuben county and State of New York, before Edwin C. English, a notary public in and for the county of Steuben.

Appearances: George T. Spencer, for defendant; Edwin H. Risley, for the complainant.

The defendant's counsel offers in evidence the record of the proceedings of the board — trustees of the village of Corning, Rec-
61 ord Book No. 2, by which it appears on page 356, that a tax of $750.00 was voted by the tax-payers for a sewer from Erie avenue to Chemung river on Pine street, vote by tax-payers taken on March 4th, 1884, and by which it appears on page 366 under date of April 8th, 1884, that trustees Kingsbury, Peart and Healey were appointed pavement and sewer committee; and by which it appears on page 369 under same date, that the committee on pavement and sewers were directed to cause plans and specifications to be prepared for the construction of the sewer voted at the election of March 4th, from the south side Erie avenue through Pine street to the Chemung river and that said committee be authorized to advertise for proposals for the contract to be awarded by the board; and whereby it appears on page 382 under date of May 3, 1884, that Michael Eustice is the lowest bidder for the construction of the sewer, the pavement and sewer committee were instructed to make a contract with him to construct the same at his bid of $937.00; and whereby it appears on page 383 under date of June 2d, 1884, that the pavement and sewer committee reported that they had made a contract with Michael Eustice at his bid of $937.00 to construct sewer in Pine street and that the action of the committee was ratified by the board of trustees; and whereby it appears on page 392, under date of July 7th, 1884, that Trustee Kingsbury, chairman of the pavement and sewer committee, reported that on June 21st M. Eustice gave notice that he abandoned the contract for laying sewer in Pine street and that Peter Griffin, his bondsman, desiring to assume the contract, the committee had en-
62 tered into a contract with Peter Griffin to complete the job, and whereby it also appears that the action of the committee as reported by its chairman was ratified by the board of trustees; and whereby it appears under date of July 14th, 1884, on page 393, that the pavement and sewer committee were authorized to accept

the sewer in Pine street when completed and approved by the engineer and to draw a voucher to pay the contractor for the same; and whereby it appears on page 394 under date of July 21st, 1884, that the pavement and sewer committee reported the acceptance of said sewer, and that the committee had issued a voucher to him for $937.00, the amount of his contract which they ask the board to audit, and whereby it also appears that the report of the committee was accepted and the voucher issued to Peter Griffin for $937.00 was audited; and whereby it appears on page 422 that at the annual election held March 3d, 1885, a tax was voted of $550.00 for the extension of the Pine-street sewer from south side of Erie avenue to the south side of First street; and whereby it appears on page 430 under date of April 6th, 1885, that the pavement and sewer committee were instructed to prepare plans and specifications for the extension of the Pine-street sewer and to advertise and receive bids for the construction of the same, the letting of the contract to be acted upon by the board; and whereby it appears on page 440 under date of April 7th, 1885, that the pavement and sewer committee awarded the contract for the extension of the Pine-street sewer at the sum of $550.00; and whereby it appears on page 441 under the same date, that the committee was instructed to
63 enter into a contract with W. G. Gibbons for the construction of the Pine-street sewer at the sum of $550.00.

The counsel for the defendant also offers in evidence chapter 94 of the Laws of the State of New York of 1886, entitled "An act to provide for the construction and maintenance of a system of sewers in the village of Corning, New York."

Defendant's counsel also offers in evidence from the record of the proceedings of the board of trustees of the village of Corning on pages 509 and 510, proceedings of the president and trustees of the village whereby the terms of office of the commissioners named in chap. 94 of the Laws of 1886 were decided by lot as follows: No. 1, C. C. B. Walker; No. 2, H. P. Sinclaire; No. 3, F. D. Kingsbury; No. 4, Q. W. Willington; No. 5, Thomas Dwyer.

It was conceded by the complainant's counsel that the oath of office was taken and bonds were filed by the commissioners as provided by chapter 94 of the Laws of 1886.

HENRY P. SINCLAIRE sworn:

1 Q. Are you a member of the sewer commission of the village of Corning?

1 A. I am.

2 Q. Are you also secretary of that commission?

2 A. I am.

64 3 Q. From what time?

3 A. From its organization until the present.

4 Q. Is the book produced by you the record kept by you as such secretary?

4 A. It is.

5 Q. Who was elected president of that commission?

5 A. C. C. B. Walker.

6 Q. At what time was he elected?

6 A. April 10th, 1886.

7 Q. And did he continue president until his death?

7 A. He continued president until the expiration of the term to which he was elected and he was then re-elected and continued until his death.

8 Q. What was the date of his death?

8 A. January 26th, 1888.

9 Q. Have you a record of the awarding of the contract for the system of sewers for this village?

9 A. I have.

10 Q. To whom was that contract awarded by the sewer commission and when?

10 A. To John McDougall, Son & Co. of Hornellsville, N. Y., May 27th, 1887.

11 Q. Was that contract so awarded by the direction of the board?

11 A. It was.

65 12 Q. State the amount of the award.

12 A. The amount of the bid as stated by our engineer was $46,829.19.

13 Q. Was the place of C. C. B. Walker, as commissioner, filled by appointment after his death?

13 A. It was, by the appointment of Stephen T. Hayt on January 31, 1888; on —, 1888, Mr. F. D. Kingsbury was elected president to succeed C. C. B. Walker.

1 X Q. Did the contractor under the contract made with the board of sewer commission complete his contract according to its terms, or substantially so?

1 X A. He did.

2 X Q. Is that system of sewers in use in the village of Corning at the present time?

2 X A. It is.

3 X Q. Are those system of sewers provided by the sewer commission for the purpose of draining the surfaces of the streets and the private property of citizens along the line and adjacent to the sewers?

3 X A. They are.

4 X Q. Are the sewers now in use for the purpose of draining the streets and private property along the line of the sewers?

4 X A. They are.

5 X Q. Was the expense of laying the sewers provided for
66 in the contract, paid for out of moneys raised by issuing bonds provided for in the act which created the board?

5 X A. They were.

6 X Q. Has there been any additions, extensions or changes in the system of sewers originally adopted by the board which have been voted on by the tax-payers of the village of Corning?

6 X A. No.

7 X Q. Has the board of commissioners made an annual report on the 1st day of January in each year since their organization to

the board of trustees of the village, a detailed estimate of the sum of money necessary for the purposes prescribed in the 7th section of the act creating the board?

7 X A. They have made such a requisition in each year, but not on the 1st of January. It was done as soon after as practicable. It was done for the maintenance of the sewers and care of them.

8 X Q. Have the village trustees provided by taxation of the taxable property of the village, the funds necessary to pay the interest on the bonds and the other current expenses and improvements made by the commission, on the sewers?

8 X A. They have.

9 X Q. Has the board elected a treasurer under the provisions of the act creating it?

9 X A. They have.

10 X Q. Was there provided at the building of these sewers, catch-basins at the junctions of streets and along the line of
67 the sewers, connecting with the sewers, for taking the surface water from the streets into the sewers?

10 X A. They were.

11 X Q. Were the openings into the catch-basins covered with grates?

11 X A. They were.

12 X Q. Are the same grates now in use, those which were put in at the time the sewers were constructed?

12 X A. They are, so far as I know.

H. P. SINCLAIRE.

Defendant's counsel offers in evidence an agreement made May 31st, 1887, between the board of sewer commissioners of the village of Corning of the first part and John McDougall, Son & Co., contractors, of the second part, whereby the party of the second part agrees with the party of the first part for a consideration thereinafter mentioned and contained, to furnish at his own proper cost and expense all the necessary labor and material and to excavate for and build in a good, firm and substantial manner, the sewers as designated on the plans and the connections and appurtenances of every kind complete, of the dimensions, in the manner and under the conditions thereinafter specified; and whereby the sewers are to conform to the plans on file in the office of the engineer at Newark, N. J., and in the office of the Corning Gas Company at Corning, N. Y., and whereby, under specification 7, the castings shall conform accurately to the dimensions on plans furnished; and
68 whereby, under specification 23, manholes, flush tanks, inlets, basins and other appurtenances shall be built into the sewers of the size, form, thickness and in the manner shown by the plans, and by specification 25 the proposals for manholes and basins shall be for each vertical foot of brick-work and a price per pound for iron-work. The proposals for flush tanks and half basins shall be at a lump sum, including the iron-work. The prices shall include the entire cost for excavation and construction according to the plan, back filling and so forth; and whereby, by specification

47, the party of the second part agreed to receive the following prices as full compensation for furnishing all materials and doing said work and for all labor and tools used in building and constructing, excavating and back filling and in all respects completing the aforesaid work and appurtenances in the manner and under the conditions before specified, under which are specified the price per vertical foot of basins, including all materials and labor, the price per half basin complete, the price per pound for iron-work in place.

The complainant's solicitor has the right to insert any part of said contract which he may designate.

FRANK D. KINGSBURY sworn:

1 Q. What is your age, residence, and occupation?

69 1 A. My age is 42, residence Corning, N. Y., and occupation insurance and gas works.

2 Q. Are you a member of the sewer commission of this village?

2 A. I am.

3 Q. And have been since the organization of the commission?

3 A. Yes, sir.

4 Q. In the years 1884 and 1885 were you a trustee of the village of Corning?

4 A. I was.

5 Q. In those years were you chairman of the committee on pavements and sewers?

5 A. I was.

6 Q. In connection with the construction of the Pine-street sewer and extension, were there any basins made for the purposes of that sewer?

6 A. Yes, sir.

7 Q. Any grates used over the basins?

7 A. There were.

8 Q. Were they of the same pattern that are now in use with that sewer?

8 A. They were.

9 Q. Were those patterns with parallel openings on top?

9 A. They were.

10 Q. Were there any other sewers connected with the Pine-

70 street sewer prior to the construction of the sewers under the contract of 1887?

10 A. No sir.

11 Q. There are two of those grates between Market street and Tioga avenue, for what purpose were they put in?

11 A. To take the surface water.

12 Q. Are those tanks connected with any sewer constructed by the sewer commission?

12 A. No sir, not to my knowledge.

13 Q. Do you understand they are connected with a sewer constructed by the Erie Railroad Company?

13 A. Yes, sir.

14 Q. Were not the basins on Pine street and in this locality on Walnut street put in as a part of the system of paving those streets?

14 A. Yes sir. They were put in at the same time the pavement was laid, that is, such of them as are in the paved locality. So many of the catch-basins on Pine street as are in the paved portion of that street were put in at the time the street was paved, those between Market street and Erie avenue were put in in 1884, those in the Dickinson House square were put in in 1885 and the remainder of them, between Erie avenue and 1st street were put in when the extension of Pine-street sewer was built.

15 Q. At what time were the basins and grates between Erie avenue and Market street on Cedar street put in?

71 15 A. In 1884. They were put in the same time the pavement was laid and in connection with it.

16 Q. At that time was there any sewer on that street?

16 A. There was a private sewer and these were put in in connection with that.

17 Q. At that time the grates that were used were of the pattern with parallel openings?

17 A. Yes sir.

18 Q. Are you an officer of the Corning Gas Company?

18 A. I am.

19 Q. Does the map now shown you embrace the plan of the sewerage system of the village of Corning as the sewers were finally constructed under the agreement with the contractors, with such modifications as were made in the process of construction under the said agreement?

19 A. Yes sir. Exactly so far as I know.

20 Q. Has this plan been kept in the office of the Corning Gas Company?

20 A. It has.

21 Q. Does this plan indicate the streets and alleys occupied by what is termed the old sewer?

21 A. Yes sir.

22 Q. Does it indicate the old sewer extending from First street to the Chemung river?

22 A. It does.

72 23 Q. Does it also indicate old sewer from Pine street through an alley to Cedar street and thence to the Chemung river?

23 A. It does. The storm sewer is indicated by a blue dotted line extending from First street to the river, the house sewer is indicated by a red dotted line extending from Pine street through an alley to Cedar street and thence to the river, that was a private sewer.

24 Q. Since the construction of the sewer system by the commission has that commission had exclusive charge of what you have called the private and the old sewer?

24 A. Yes, sir.

1 X Q. How many catch-basins were placed in the system of sewers constructed under contract with the sewer commission?

1 X A. I cannot tell.

2 X Q. The sewer between Erie street and the river in Pine street was built in 1884?

2 X A. Yes, sir.

3 X Q. That sewer was constructed by the direction of the trustees of the village of Corning, was it not?

3 X A. Yes, sir.

4 X Q. About how many catch-basins were employed in that sewer at the time it was constructed, as near as you can state?

4 X A. There were put in that year five, I think.

73 5 X Q. Has there been any put in that street since the sewer was built?

5 X A. Yes, sir.

6 X Q. How many?

6 X A. Between Erie avenue and the river, five I think.

7 X Q. When were they put in and under whose direction?

7 X A. They were put in under the direction of the village in the year 1885, with one exception. One possibly put in in 1886.

8 X Q. How many catch-basins were in use in the village at the time the sewer commission was organized and took charge under the act of 1886?

8 X A. All that are of a smaller size than those put in by McDougall, Son & Co.

9 X Q. Are all of the small catch-basins and grates now in use in the village the same that were in use at the time the sewer commission took charge of the sewers?

9 X A. They are.

10 X Q. Were all of the small catch-basins and grates in use in the village put in under the direction of the village trustees before the passage of the act creating the sewer commission?

10 X A. To the best of my knowledge, they were.

11 X Q. Were the mouths of those small catch-basins, put in by the village, slightly circular on the inner edge?

11 X A. I cannot tell.

74 12 X Q. Was the grate employed in those catch-basins put in by the village, circular in form composed of two parts, a base ring and an upper grate with longitudinal slots in the top, supported by pins between it and the base ring and so arranged that they could be lifted out?

12 X A. Yes, sir.

13 X Q. How many pins supported the upper grate?

13 X A. My impression is four.

14 X Q. Where were those small grates procured from?

14 X A. They were furnished by the contractor. They were made by Reed and Cooper of Elmira.

(By Mr. SPENCER:)

25 — Q. Were those grates put in by the paving contractor as a part of his contract?

25 X A. I am not sure, but I think they were, so far as is included in the Dickinson House square.

15 X Q. The private sewer to which you refer in your previous answers, do you mean by that it was a sewer built by the trustees for the use of private parties? If not what do you mean by private sewer?

15 X A. The private sewer I referred to was built by Heermans & Lawrence for the use of residents along the territory covered. It was a private enterprise entirely.

16 X Q. Did the village authorities of the village of Corning place catch-basins and grates for taking the surface water from the street and connect those basins with this sewer?

75 16 A. They did.

(By Mr. SPENCER:)

26 Q. Does that include the grates between Market street and Tioga avenue on Cedar street?

26 A. It does not.

F. D. KINGSBURY.

FRANCIS E. YOUNG sworn:

1 Q. What is your age, residence and occupation?

1 A. I am in my 82d year, reside at Painted Post, N. Y., occupation, not much to do.

2 Q. Have you ever been engaged or employed in operating a mill or machinery propelled by water?

2 A. No, sir.

3 Q. Have you at any time been acquainted with a mill or machinery propelled by water?

3 A. I have.

4 Q. More than one?

4 A. Yes.

5 Q. At what place or places?

5 A. In 1825. At Painted Post, N. Y., and at Canton, Bradford Co., Pa.

6 Q. What means or device have you seen employed to prevent floating substances entering the flume or curb into which the water flows for supplying the mill?

76 6 A. A rack.

7 Q. Describe the rack.

7 A. It was composed of upright pieces or slats to serve as a strainer, to keep trash from going into the water wheel.

8 Q. At what interval or space were these slats placed?

8 A. Probably an inch, as near as I can remember now.

9 Q. In what part of the flume or curb were they placed?

9 A. At that part of the flume next to the water wheel, where the water entered the flume.

10 Q. How were the slats secured?

10 A. They were secured to pieces above and below.

11 Q. What was the position of those slats?

11 A. Perpendicular.

12 Q. How long ago have you seen racks of that kind?
12 A. Between sixty and seventy years.
13 Q. And up to what time?
13 A. Up to the present time; not so many lately.
14 Q. State in what places you have seen them.
14 A. In more than fifty different places.
15 Q. How far usually did the top of the frame extend above the surface of the water?
15 A. From one to two feet.
16 Q. How deep did they extend into the water?
77 16 A. That would depend on the depth of the flume. They extended to the bottom of the flume.
1 X Q. The purpose of the rack which you have described was to prevent wood and floating substances from being drawn into the wheel, was it not?
1 X A. Yes, sir; that is my understanding.
2 X Q. The rack to which you have referred was formed of wood slats about one inch in thickness, running from the bottom of the flume vertically to about two feet above the surface of the water and filled the entire space of the flume and were used for the purpose of preventing floating substances, too large to go through the wheel, from getting into the wheel?
2 X A. That was my impression, that is what I supposed they were for. They were strainers.

Redi.:

17 Q. Have you ever seen this device applied to any other purpose? Have you ever seen such a device applied to prevent floating substances entering a drain?
17 A. I have.
18 Q. Have similar devices been in common use to prevent floating substances entering blind ditches? Have you known such devices being in common use for that purpose?

Objected to.

Q. State what you know about that.
18 A. That is the universal custom so far as I know.

Complainant's counsel moves to strike out the answer of
78 the witness on the ground that the answer is incompetent.

3 X Q The strainers to which you refer as being used in blind ditches and drains consisted of slats with openings between, placing them in a vertical position in front of the mouth of the drain?
3 A. Yes, sir.
4 X Q. The purpose of such construction was to prevent floating substances, too large to pass through the drain, from entering the drain?
4 X A. Yes, sir.

F. E. YOUNG.

WARREN S. HODGMAN sworn:

1 Q. What is your age, occupation and place of residence?

1 A. I was sixty-five last December, by occupation a miller and I reside at Painted Post, N. Y.

2 Q. Have you been engaged in operating a mill or machinery propelled by water?

2 A. I have.

3 Q. How long have you been so engaged?

3 A. About forty-four years.

4 Q. At what place or places?

4 A. Four years at Bath, N. Y., and forty years at Painted Post.

5 Q. In what kind of a mill have you been so employed or engaged?

79 5 A. In three kinds, flouring-mill, plaster-mill and saw-mill.

6 Q. In the mill operated by you does the water by which it is propelled pass through a flume into a wheel?

6 A. It does.

7 Q. What means or device, if any, were employed to prevent the passage of floating substances from passing into the wheel?

7 A. A rack, sometimes two. The first one right in front of the flume to keep out logs and large substances from going in, and then below we put in a finer one with slats about an inch or three-fourths of an inch apart. The slats run from the bottom of the flume to the top. The flume is made of plank and we nail the top of the slats to one of the caps across the top of the flume; at the bottom we put a plank across the width of the flume and nail the bottom ends to that; we put pieces between them; we put the slats at *a*t angle, up the stream, of about forty-five degrees; sometimes they stand perpendicular; the rack extends the whole width of the flume.

8 Q. How long have you known that device to be used for that purpose?

8 A. Fifty years.

9 Q. At what place or places?

9 A. One at the Borden iron works in Troy, N. Y., 1850, or about that; have seen them at one hundred different places; at the mills operated by me at Painted Post, and at Bath.

80 10 Q. Have you seen similar devices used for other purposes than for mills?

10 A. I have.

11 Q. What purpose?

11 A. Blind drains.

12 Q. How long have you seen it used for blind drains?

12 A. Fifty years.

13 Q. Have you made use of them yourself for that purpose?

13 A. I have.

14 Q. How long ago?

14 A. Between forty-five and fifty years.

1 X Q. The rack which you refer to as having been used in blind

drains, were the slats placed in a vertical position in front of the inlet to the drain?

1 X A. They were.

2 X Q. Did those racks consist of slats driven into the ground at a little distance apart so as to form a strainer across the mouth of the drain for preventing floating substances in the water that were too large to pass through the drain from going into the drain?

2 X A. Yes, sir.

W. S. HODGMAN.

81 It is consented by both parties that either party may read from any statute of the State of New York any part thereof relating to the village of Corning or applicable thereto.

PETER W. CAULKINS sworn:

1 Q. Where do you reside?

1 A. In the village of Corning.

2 Q. Are you employed by the board of sewer commissioners of the village of Corning?

2 A. Yes, sir.

3 Q. What is the nature of your employment?

3 A. Superintendent of sewers, and inspector.

4 Q. As such have you become familiar with the whole system of sewers in the village at present?

4 A. I have.

5 Q. Do you know how many small catch-basins there are with parallel openings at the top, designated as the smaller grates? If you do state the number.

5 A. There are twenty.

6 Q. How many are there of the larger size with openings at the top converging to the centre?

6 A. One hundred and four.

7 Q. In the larger-sized grates have you observed how many lateral openings, or openings at the side, between the posts, there are?

82 A. I have.

Q. How many?

7 A. Ten posts and ten spaces.

8 Q. What is the form of the posts, or supports?

8 A. They are a little wider than thick.

9 Q. About what size?

9 A. About two inches one way and about one and one-fourth inches the other. They are one and one-half inches in height, making a space of one and one-half inches between the top and ring.

10 Q. Has there been a good deal of trouble in catch-basins filling up in the village?

Objected to by the complainant's counsel as incompetent under the pleadings.

10 A. There has.

1 X Q. How many grates are there of large size with parallel openings of the same form as the small ones?

1 X A. Not any.

2 X Q. As I understand you one hundred and twenty-four are all the gratings now in use in the village connected with the sewers?

2 X A. Yes, sir.

3 X Q. Are all the grates in use in the village of Corning provided with openings through the top for the passage of water?

3 X A. They are.

83 4 X Q. Are the grates in use provided with a lower base ring connected to the grate proper, supported upon bearings which connect the base ring and the grate proper?

4 X A. Yes, sir, they all are.

5 X Q. Do the grates in use fit into a catch-basin which opens into the sewer and serves as a covering to the sewer?

5 X A. There is a cast band that fits in between the brick, and the base ring fits down into that.

P. W. CAULKINS.

HIRAM PRITCHARD sworn:

1 Q. What is your age and place of residence?

1 A. My age at my next birthday, which occurs on the 7th of February, will be seventy-two. My residence is Corning, N. Y.

2 Q. Have you ever been engaged or employed in a mill or machinery operated by water?

2 A. I have on my own account and for others.

3 Q. At what place or places?

3 A. In Tioga county, Pa., in 1828; in Corning, N. Y., in 1838; in Clinton county, Pa., in 1850, 1851, 1852, and 1853.

4 Q. In any of these mills did you employ or see employed any device to prevent floating substances from passing from the water into the wheel, or wheels, with which the mill was operated?

84 4 A. I have constructed them myself and had them constructed for me by mechanics when I have been in business for myself.

5 Q. State the nature and construction of the device and their application.

5 A. At the head of the flume we would put a rack, depending for its length on the head of water we had. They were built of strips separated by blocks to make them firm and had openings between the slats for the passage of water. The object was to prevent floating substances from getting into the wheel.

6 Q. At what places have you seen those devices?

6 A. At the places I have named and at a hundred different places or more.

7 Q. Aside from such a rack at the mouth of a flume, have you seen them in other places?

7 A. I have; sometimes we would have two, one at the opening of the flume and the other near the wheel.

8 Q. Have you seen a similar device in connection with the curb sometimes used in connection with the water wheel?

8 A. I have.

9 Q. Describe it.

9 A. In 1839 or 1840 one mile from here, I ran a grist-mill. We put in a new wheel under the flume and the water dropped from the bottom of the flume into the wheel. We made a circle
85 or curb around the wheel. We raised and lowered the curb and so used it as a gate. We had an iron rack inside of the curb the size of the inner diameter, with iron rods extending across to keep floating substances from getting into the wheel. This rack of iron rods had openings to let the water pass through, but would stop any floating substances which would tend to clog the wheel.

10 Q. How long was that device in use?

10 A. I left it there in 1843.

11 Q. Have you ever seen that device in any other mill?

11 A. I never have.

12 Q. Those racks you have mentioned, were they placed perpendicularly, or otherwise?

12 A. They were placed at a slight angle from perpendicular.

13 Q. Most of the cases where you have seen them were more than twenty years ago?

13 A. Yes, sir.

1 X Q. Were the racks to which you have referred as being used in flumes constructed of slats running from the bottom of the flume to above the water line across the whole width of the flume, placed either vertically or at a slight angle with the current, the slats being separated to allow the passage of the water?

1 X A. They were.

86 2 X Q. The particular rack which you referred to as having used in your mill about 1840, was it located inside of the tube to which you refer?

2 X A. It was.

3 X Q. Did the bottom of the tube when resting on the bottom of the flume inclose the opening in the bottom of the flume on to the wheel?

3 X A. Yes sir.

4 X Q. Was the water let on to the wheel by raising the tube?

4 X A. It was.

5 X Q. Where was the grate located in the tube, at the bottom or the top?

5 X A. Both places.

6 X Q. Was there a grate placed over the bottom of the flume, over the opening?

6 X A. There was no grating across the opening in the bottom of the flume; there was a grate at the top of the tube.

7 X Q. Did you have anything to do with the construction of what is known as the Erie sewer?

7 X A. I did.

8 X Q. When was it constructed?

8 X A. In 1861.

9 X Q. Where is that sewer?

9 X A. It now runs from Erie avenue south side down Walnut street to the river; it is constructed of stone, covered with stone, and is just six feet in the clear.

87 10 X Q. Was it paid for by the Erie company?

10 X A. It was.

11 X Q. Was it constructed to take the surplus water from Monkey run?

11 X A. Yes sir.

12 X Q. Is that any part of the sewer system of the village of Corning?

12 X A. It is not.

H. PRITCHARD.

The defendant here closed his evidence.

I, E. C. English, the notary public duly appointed and commissioned, took the foregoing evidence at the place above mentioned on the 16th day of October, 1889, and the same is all of the evidence taken before me, and I further certify that the same was read over to each witness at the conclusion of his testimony, and was corrected and signed by the respective witnesses in my presence, and the same is the whole of such evidence. And I further certify that I have no interest in the pending case.

Dated October 16th, 1889.

E. C. ENGLISH,
Notary Public.

(Indorsed:) Def't's evidence. Filed Oct. 31, 1890. W. S. Doolittle, clerk.

The following is added to the foregoing evidence by consent of complainant's counsel:

The following resolution was adopted at an adjourned reg-
88 ular meeting of the board of trustees held on April 10, 1882:

By Trustee HADDEN:

Resolved, That Messrs. Heermans & Lawrence have the privilege of laying a line of sewers for sewerage purposes only, as follows: Beginning at Cedar street at the Chemung river and running thence on Cedar street to the alley between Tioga avenue and Market street, thence westerly in said alley to the public square, thence southerly through said square and Pine street to a point in Pine street one hundred feet southerly from the N. Y. L. E. & W. R. R. tracks and also lateral branches from Pine street in the alley between Market street and Erie avenue, one hundred and fifteen feet in length as appears by reference to a map attached to petition to board of trustees dated April 10th, 1890, said sewer to be laid five feet below the road surface and to be constructed for the benefit of stores, offices and hotels situate on the streets above named. The expenses thereof to be paid by the said Heermans & Lawrence without any costs whatever to said village of Corning. This privilege is granted upon the con-

dition that the said Heermans & Lawrence shall replace the soil removed and tamp the same down so as to leave the surface of said streets and alleys even and in as good condition as now. Said work to be speedily conducted and sufficient roadway maintained during the time of construction. The trustees of said village of Corning have the right to revoke the foregoing grant and take possession of said sewers whenever they see best to adopt and replace the same by public sewers. The said Heermans & Lawrence not to have the right to interfere with any other pipes, and they, Heermans
89 & Lawrence, to keep the ditches properly guarded during the time of construction. Adopted.

CITY OF CORNING, *ss:*

I, Frank L. Pease, late clerk of the village of Corning, and now clerk of the city of Corning, and having the custody of the records and of the seal of said village, do hereby certify that I have compared the foregoing copy of a resolution of the board of trustees of said village with the original record thereof and that the same is a true and correct transcript of the record of said resolution and of the whole thereof.

In witness whereof I have hereto subscribed my name
[L. S.] and affixed the seal of said village this 13th day of June, 1890.

FRANK L. PEASE, *City Clerk.*

(Indorsed:) Filed Oct. 31, 1890. W. S. Doolittle, clerk.

90 *Opinion.*

PALMER
vs.
VILLAGE OF CORNING.

WALLACE, *J.:*

In view of those things in prior use so well known that the courts take notice of them without proof, the patent in suit must be held invalid for want of patentable novelty. The change in form of the old sewer grates mentioned in the patent, by which the top is elevated so as to provide lateral spaces below it for the water to flow through, involved nothing more than mere mechanical adaptation.

The bill is dismissed with costs.

(Indorsed:) Mem. Wallace, J. Filed Dec. 1, 1890. W. S. Doolittle, clerk.

91 *Bond on Appeal.*

Circuit Court of the United States of America for the Northern District of New York.

CYRUS F. PALMER, Appellant,
vs.
THE VILLAGE OF CORNING, Respondent.

Know all men by these presents that we, Cyrus F. Palmer and Frank C. Palmer, both of the city of Utica, county of Oneida and State of New York, are held and firmly bound unto the above-named The Village of Corning, respondent, in the sum of two hundred and fifty dollars, to be paid to the said Village of Corning; for the payment of which, well and truly to be made, we bind ourselves and each of us, our and each of our heirs, executors, and administrators, jointly and severally, firmly by these presents.

Sealed with our seals and dated this 17th day of March, in the year of our Lord one thousand eight hundred and ninety-one.

Whereas the above-named Cyrus F. Palmer has prosecuted an appeal to the Supreme Court of the United States to reverse the decree rendered in the above-entitled suit by the judges of the circuit court of the United States for the northern district of New York:

Now, therefore, the condition of this obligation is such that if the above-named Cyrus F. Palmer shall prosecute said ap-
92 peal to effect and answer all damages and costs if he fail to make said appeal good, then this obligation shall be void; otherwise the same shall be and remain in full force and virtue.

CYRUS F. PALMER. [L. S.]
FRANK C. PALMER. [L. S.]

Sealed and delivered and taken and acknowledged this 17th day of March, 1891, before me, a notary public in and for Oneida county, N. Y.

MILTON E. ROBINSON,
Notary Public, Oneida Co., N. Y.

Approved by—
WM. J. WALLACE,
Circuit Judge.

(Indorsed:) Supersedeas bond. Due and personal service of a copy of the within supersedeas bond is admitted this 21st day of March, 1891. Geo. T. Spencer, attorney & solicitor for the village of Corning. Filed Mar. 23, 1891. W. S. Doolittle, clerk.

93 *Appeal.*

Circuit Court of the United States for the Northern District of New York.

CYRUS F. PALMER
vs.
THE VILLAGE OF CORNING.

The above-named complainant, Cyrus F. Palmer, conceiving himself aggrieved by the order and decree entered on the 17th day of December, 1890, in the above-entitled proceedings, doth hereby appeal from said order and decree to the Supreme Court of the United States, and he prays that this his appeal may be allowed and that a transcript of said record and proceedings and papers upon which said order and decree was made, duly authenticated, may be sent to the Supreme Court of the United States.

EDWIN H. RISLEY,
Solicitor and of Counsel for Complainant and Appellant,
Cyrus F. Palmer.

UTICA, N. Y., *March* 18, 1891.

And now, to wit, on this 18th day of March, 1891, it is ordered that the appeal be allowed as prayed for.

WM. J. WALLACE,
Circuit Judge.

94 *Citation.*

UNITED STATES OF AMERICA, *ss:*

To the Village of Corning, Greeting:

You are hereby cited and admonished to be and appear at the Supreme Court of the United States, to be holden at Washington within thirty days from the date of this citation, pursuant to an appeal filed in the clerk's office of the circuit court of the United States for the northern district of New York, wherein Cyrus F. Palmer is complainant and appellant and The Village of Corning is defendant and respondent, to show cause, if any there be, why this judgment in the said appeal mentioned should not be corrected and speedy justice should not be done to the parties in that behalf.

Witness the Hon. Melville W. Fuller, Chief Justice of the United States, this 18th day of March, in the year of our Lord one thousand eight hundred and ninety-one.

WM. J. WALLACE,
Circuit Judge.

(Indorsed:) Appeal and allowance. Due & personal service of a copy of the within appeal, allowance, and citation is admitted this 21st day of March, 1891. Geo. T. Spencer, attorney & solicitor for the Village of Corning. Filed Mar. 23, 1891. W. S. Doolittle, clerk.

95 UNITED STATES OF AMERICA, *Northern District of New York*, } ss:

I, William S. Doolittle, clerk of the circuit court of the United States of America for the northern district of New York, in the second circuit, do hereby certify that the foregoing pages, numbered from 1 to 94, inclusive, contain a true and complete transcript of the record and proceedings had in said court in the case of Cyrus F. Palmer against Village of Corning as the same remain of record and on file in said office.

Seal of the U. S. Circuit Court, Northern District N. Y.

In testimony whereof I have caused the seal of the said court to be hereunto affixed, at the city of Utica, in the northern district of New York, in the second circuit, this seventh day of April, in the year of our Lord one thousand eight hundred and ninety-one, and of the Independence of the said United States the one hundred and fifteenth.

W. S. DOOLITTLE, *Clerk.*

Endorsed on cover: Case No. 14,595. N. New York C. C. U. S. No. 137. Cyrus F. Palmer, appellant, *vs.* The Village of Corning. Filed April 27, 1891.

Supreme Court of the United States.

OCTOBER TERM, 1894. No. 137.

CYRUS F. PALMER,
Complainant and Appellant,
vs.
THE VILLAGE OF CORNING,
Defendant and Appelee.

Appellant's Brief.

STATEMENT.

This is an appeal from a decree of the Circuit Court of the United States of America, for the Northern District of New York, made on the 10th day of December, 1890, by the Hon. William J. Wallace, Circuit Judge, in and by which the bill of complaint was dismissed with costs.

Record, page 10.

The bill was filed April 18, 1889, and was brought to restrain the infringement of letters-patent number 134,978, granted January 21, 1873, to Henry W. Clapp, for an improvement in Gratings for Sewer Inlets, and all right, title and interest under which, within certain territory in New York State, including the county of Steuben and the village of Corning, said Clapp had duly assigned to this complainant, and was brought, also, to recover damages and profits because of said infringement.

Bill of Complaint, Record, page 1.
Patent specification and drawing, Record pp. 28, 29.
Assignment of Patent and Power of Attorney, Record, page 30.

A subpoena was issued and served on the defendant on the 22d day of April, 1889.
Record, page 5.

On the 28th day of May, 1889, the defendant duly appeared by its solicitors, and filed its answer on July 1st, 1889. On the same day the replication was filed. Testimony was thereafter taken on behalf of each party, before notaries public as examiners, and the case was heard on the printed record on the 21st day of November, 1890.

On page 48 of the Record is the opinion of the court, which, in full, is as follows:

"In view of those things in prior use so well known "that courts take notice of them without proof, the "patent in suit must be held invalid for want of patent-"able novelty. The change in form of the old sewer "grates mentioned in the patent, by which the top is ele-"vated so as to provide lateral spaces below it for the "water to flow through, involved nothing more than mere "mechanical adaptation."

The decision and decree are alleged to be erroneous by this appellant, in holding that the patent in suit was invalid for want of patentable novelty, and in not holding that the patent was good and valid and infringed.

During the pendency of this action the patent has expired, so that the only relief which the complainant can now obtain is damages and profits.

POINTS.

I.

The defendant contended below that the construction and control of the sewers of the village of Corning were under the sewer commissioners of the village of Corning, but it appears that the village paid for the sewer system, including the wells and gratings, by tax, and are using the same; and by what agency or means they are placed there, or who is the village agent in caring for them is immaterial, and the contention is frivolous, and the court below did not consider it.

II.

The defendant in the court below also contended that the claim of the patent was not for a combination, and that the grating in itself was an old element claimed as part of the claim, and, therefore, the patent was void on its face. These objections are also frivolous.

The claim is "the grating for sewer-openings *herein de-*"*scribed*, consisting of the ring *a*, supporting pins *b*, and "elevated grating, substantially as specified."

There is only one claim in the patent, and all the elements unite to form "the grating for sewer openings," which is claimed; and there are three elements united to form "the grating for sewer openings," to wit: First, "ring *a*;" second, "supporting pins *b*;" third, "elevated "grating."

For the purpose of the argument, it may be admitted that each one of these elements taken separately is old,

and it is only in the combination of them that the invention consists.

"Any form of words may be employed in a claim for a "combination provided it accurately describes the real "invention."

Robinson on Patents, § 526.

"A claim for a combination covers the exact combina- "tion claimed and nothing more. It does not protect the 'elements of the combination. . . . . It does not em- "brace any other union of the same elements with each "other. . . . . Where it omits certain elements it ex- "cludes them from the combination . . ; and where it treats "certain elements as necessary they cannot afterwards "be declared by the inventor to be unnecessary . . . "

Robinson on Patents, § 527.

See Rowell vs. Lindsay, 113 *U. S.*, 97,

and note the simplicity of the mechanical constructions involved, about which no suggestion is made of want of invention.

There is no attempt in this case to dispense with an element of the combination, or to contend that the defendant substituted any equivalents; its construction is so identical with that shown in the patent, that a careful examination discloses no variation.

"Novelty is not negatived by the fact that every part "of the patented thing is old." (*Bates v. Coe*, 98 *U. S.*, 48.) "This rule necessarily follows from the doctrine "which allows patents for new combination of old de- "vices. In such cases the whole is different from the "sum of all its parts, precisely as this printed page is "different from what it would be if the same words were

"arranged in alphabetical order, or were printed promis-
"cuously upon the paper."

Walker on Patents, § 66.

III.

The only question in this case is whether the making of "the grating for sewer openings" described and claimed in the patent, was an invention or involved anything more than mechanical adaptation.

Assuming that the grating portion of the invention was old and had theretofore been applied by placing it over a sewer opening in the same plane with the surface of the street or gutter, the grate thus used is subject to being clogged by straws, sticks and debris, which, while small enough to readily pass through the openings in the grate, still lodge upon the cross-bars thereof, and gradually accumulating there, finally clog the grate. The inventor was met with this state of affairs and endeavored to overcome this trouble.

In this connection it will be well to consider the long number of years that grates substantially of this class had been in use.

The object to be attained was so to agitate the water and debris coming to the grate, or so to scrape the grate, or brush it, to keep it free of such small debris, and work the debris through the grate. If the inventor had provided a brush for brushing the grate, or a scraper for scraping the grate, or used some means for rotating the grate, whereby it was kept free of debris,

and such mechanism was operated by other mechanism located in the sewer well, and operated by the flow of water into the sewer, the defendant and the Honorable Judge who previously decided this case, would be undoubtedly ready to concede that the inventor had made an invention; but instead of producing such impracticable mechanism, he accomplishes the result by a simple change in elevating the grate slightly above the opening.

In this argument we do not wish to be understood as trying to enlarge the scope of the patent, but, in view of this, is the inventor to be restricted or adjudged a mere expert mechanic in accomplishing the end by the simple change?

Simplicity of construction, while liable to lead courts and subsequent examiners of the invention, into error, is often evidence of the highest inventive genius. This is well stated by Judge Coxe (N. Y.,) in the case of the American Cable Company v. Mayor of New York, 64 O. G., 1008, (56 Fed. Rep., 149,) in which he says:

"It is said that what Miller did was a simple "change within the sphere of the skilled mechanic. "Simple it undoubtedly was; but the idea never "occurred to any of the myriad of mechanics "and inventors who for many years have made "the improvement of cable railways their distinctive "work. The idea underlying most of the great inven- "tions is a simple one. Such an idea came to the Cor- "nish boy, who was employed to manipulate the valves "of the old Newcomen steam engine. One day, anxious to "join his comrades at their sports, it occurred to him that "the walking-beam vibrating above his head could be "made to do his work. Once conceived, it was the eas- "iest of tasks to carry out the idea. An ordinary me-

"chanic could have done it, and yet the embodiment of "that idea gave to the world the first automatic steam-en- "gine. So, too, the central ideas underlying the safety- "lamp, the sewing-machine, and even the telephone are "exceedingly simple. A school boy can understand them "now; but their authors were peerless inventors never- "theless, and an argument to prove the contrary would "hardly be listened to with patience. Miller stands upon "a distinctively higher plane than many inventors whose "patents have recently been sustained by the Supreme "Court."

Sewer grates as universally used previous to the date of the invention covered by the patent in question, were placed in streets or gutters on a line with the surface of the street, where they were subject to the tread of animals and the wheels of vehicles, tending, in a severe manner, to displace or overturn them or tip them up in the opening which they are intended to protect. An "elevated "grating" is especially liable to become thus displaced; "The ring *a*," is therefore, a necessary element in the combination to maintain the grating in place and give it a solid foundation. The "pins *b*," give the elevation and the opening into the sewer. If the base ring were omitted from the structure and a horse should step on the edge of the grate between the "supporting pins *b*" it would quickly overturn the grate. Likewise, if the grate was struck by the wheel of a vehicle.

It appears from the testimony that the grate in question has gone into extensive use. It is used in several of the principal cities and villages in the territory owned by the complainant under the patent in question.

The peculiar operation of the grate in question is also fully set forth in the complainant's testimony, both in

chief and rebuttal, and particular attention is called to the evidence showing the operation of this grate without repeating the same here.

It is contended that there is no question of doubt whatever in this case as to the production of the grate in question being an invention and involving patentable novelty; neither is there any as to its utility. The fact that the defendant had appropriated it is sufficient evidence as against it to settle the question of utility, and ought to bear quite strongly both as to the question of novelty and the question of invention.

Western Elec. Co. v. LaRue, 139 *U. S.*, 608.
Adams & W. Mfg. Co. v. Rathbun, 27 *Fed. Rep.*, 262.

The patent itself is *prima facie* evidence of the sufficiency of invention and patentability.

Seymour v. Osborne, 78 *U. S.*, 516.
Lehnbeuter v. Holthaus, 105 *U. S.*, 94.
Reiter v. Jones, 35 *Fed. Rep.* 421.
Smith v. Goodier, D. V. Co., 93 *U. S.*, 486.

The device in question consists of three elements, two of which are added by the patentee to a device theretofore used for the same purpose, but which was inefficient in operation.

In the case of *Krementz v. S. Cottle Co.*, 148 *U. S.*, 556, the patent was for a collar-button of a slightly different form from previous constructions, and this Court said:

"It is not easy to draw a line that separates the ordinary skill of a mechanic, versed in his art, from the exercise of patentable invention, and the difficulty is

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"specially great in the mechanic arts, where the succes-
"sive steps in improvements are numerous, and where the
"changes and modifications are introduced by practical
"mechanics. In the present instance, however, we find
"a new and useful article, with obvious advantages over
"previous structures of the kind. A button formed from
"a single sheet of metal, free from sutures, of a convenient
"shape, and uniting strength with lightness, would seem
"to come fairly within the meaning of the patent laws.
"The tools to be used in making the button are not de-
"scribed, but they are not claimed to be new. And the
"method or process of manufacture is described with suf-
"ficient particularity to enable anyone skilled in the art
"to follow it. Buttons made of several pieces are liable
"to break at the soldered joints, and it is stated by an ex-
"perienced witness that the metal by the process of sol-
"dering becomes soft and liable to bend. The different
"pieces are set together by hand, and are not always uni-
"form or put together truly."

It may be noted here that there are no new functions performed or claimed for the button referred to above.

Continuing, the opinion says: "The argument drawn
"from the commercial success of a patented article is not
"always to be relied on. Other causes, such as the enterprise
"of the vendors, and the resort to lavish expenditures in
"advertising, may co-operate to promote a large market-
"able demand. Yet, as well said by Mr. Justice Brown, in
"the case of *Consolidated Brake Shoe Co., v. Detroit Steel*
"*& S. Co.* 47 *Fed. Rep.*, 894, 'When the other facts in the
"case leave the question of invention in doubt, the fact
"that the device has gone into general use and has dis-
"placed other devices which had previously been em-
"ployed for analogous uses, is sufficient to turn the scale
"in favor of the existence of invention.'

"*Webster Loom Co. v. Higgins*, 105 *U. S.*, 580, was a "case where the patented device consisted in slight mod- "ification of existing mechanism, and it was contended "that this slight change did not constitute a patentable "invention; but this view did not prevail, the Court "saying: 'It is further argued, however, that supposing "the devices to be sufficiently described, they do not "show any invention, and that the combination set forth "in the fifth claim is a mere aggregation of old devices "already well known, and therefore it is not patentable. "This argument would be sound if the combination claimed "by Webster was an obvious one for attaining the ad- "vantages proposed, one which would occur to any "mechanic skilled in the art; but it is plain from the "evidence and from the very fact that it was not sooner "adopted and used, that it did not for years occur in this "light to even the most skillful persons. It may have "been under their very eyes; they may almost be said "to have stumbled over it; but they certainly failed to "see it, to estimate its value, and to bring it into notice. "Who was the first to see it, to understand its value, to "give it shape and form, to bring it into notice and "urge its adoption, is a question to which we shall shortly "give our attention.

"At this point we are constrained to say that we can "not yield our assent to the argument that the combina- "tion of the different parts or elements for attaining the "object in view was so obvious as to merit no title to in- "vention. Now that it has succeeded, it may seem very "plain to anyone that he could have done it as well. "This is often the case with inventions of the greatest "merit. It may be laid down as a general rule, though "perhaps not an invariable one, that if a new combina- "tion and arrangement of known elements produce a new

"and beneficial result never attained before, it is evidence "of invention. It was certainly a new and useful result "to make a loom produce fifty yards a day when it never "before had produced more than forty, and we think that "the combination of elements by which this was effected, "even if these elements were separately known before, "was invention sufficient to form the basis of a patent."

The collar button involved in this case could not be said to have any combination between its several parts. It was simply a button having a hollow head, a hollow neck and base all formed in one piece. The hollow performed no office except to give lightness to the button.

The case of *Washburn & Moen Mfg. Co. v. Beat 'Em All Barb Wire Co.*, 143 *U. S.*, 275, which was a case in relation to an improvement in barb wire fences, which consists in simply coiling the barb around one of two wires, constituting a strand, the court said:

"The vital difference in the two patents is in the shape "of the barb itself. . . . It is true that the affixing "of barbs to a fence wire does not apparently give a wide "scope to the ingenuity of the inventor."

After considering the extent of use and the various alleged anticipating patents, the Court says:

"Under such circumstances courts have not been re- "luctant to sustain a patent to the man who has taken "the final step which has turned a failure into a success. "In the law of patents it is the last step that wins. It "may be strange that, considering the important results obtained by Kelly in his patent, it did not occur to him to substitute a coiled wire in place of the diamond shape "prong, but evidently it did not; and to the man to whom "it did ought not to be denied the quality of inventor. "There are many instances in the reported decisions of

"this Court where a monopoly has been sustained in favor "of the last of a series of inventors, all of whom were "groping to attain a certain result, which only the last "one of the number seemed able to grasp. Conspicuous "among these is the case of *Webster Loom Co. v. Higgins*, "105 *U. S.*, 580, 591, where an improvement in looms for "weaving pile fabrics, consisting of such a new combina- "tion of known devices as to give to a loom the capacity "of weaving fifty yards of carpet a day, when before it "could only weave forty, was held to be patentable. It "was said by the court, in answer to the argument that "the combination was a mere aggregation of old and well- "known devices, that 'this argument would be sound if "the combination claimed by Webster was an obvious "one for attaining the advantages proposed.'"

An inventor is not necessarily obliged to understand the full scope of his invention. The fact that he has actually combined the elements of his invention, whereby a new and useful operative means is produced, is sufficient.

Robinson on Patents, §526, *and cases cited.*
Also, Telephone Cases, 126 *U. S.*, 1.

In this connection it may be noted that grates of the improved pattern, shown in the patent, as well as its predecessor, are intended to receive the surface water and washings of the street, containing heavy debris, as sand, grit, and soil, as well as light debris, as straw, small sticks, papers and leaves. As the surface water comes to the grate, bearing the heavy and light debris, the heavier portion is necessarily in the bottom of the current, while the light is on top. The opening between the ring and the grating furnishes a ready escape for the heavier debris, and obviates the objectionable features of flat surface grates, where the heavier debris is deposited with the light

debris on the surface of the grate, and is settled down by the pressure of water, thereby clogging the grate.

Although the court below gave no attention to the evidence of the defendant offered to negative the patentability, it may be well to consider this matter briefly.

The main reliance of the defendant appears to be in the claim that a round curb has sometimes been placed in a flume, and which was raised and lowered, over an opening in the bottom of the flume, to act as a gate to shut off the water from the opening.

The witness says that inside of this round curb there was a grating made of rods, to keep sticks from the wheel. It seems hardly possible that such a construction could have been used, in view of the fact that, if any sticks or obstructions were stopped by the grating, they would be in a position to prevent the curb being dropped down to shut off the water.

Another of the devices set up by the defendant as an anticipation, is the well-known mill-rack.

It seems like a farce to have such devices set up as anticipations of the patent in question. The readiness with which some persons are willing to state that certain old, forgotten and discarded antiquities are a complete anticipation of a modern, useful and novel invention, is one of the frequent and curious occurrences of patent litigation. Scores of witnesses swore to such alleged anticipation in the Bell Telephone Case.

In this connection, attention is directed to the remarks of this Court, in the case of the *Washburn & Moen Mfg. Co. v. Beat 'Em All Barb Wire Co.*, above mentioned, as follows:

"We have now to deal with certain unpatented devices, "claimed to be complete anticipations of this patent, the "existence and use of which are proven only by oral testi- "mony. In view of the unsatisfactory character of such "testimony, arising from the forgetfulness of witnesses "their liability to mistakes, their proneness to recollect "things as the party calling them would have them recol- "lect them, aside from the temptation to actual perjury, "courts have not only imposed upon defendants the bur- "den of proving such devices, but have required that the "proof shall be clear, satisfactory, and beyond a reasonable "doubt."

"Witnesses whose memories are prodded by the eager- "ness of interested parties to elicit testimony favorable to "themselves are not usually to be depended upon for ac- "curate information. The very fact, which courts as well "as the public have not failed to recognize, that almost "every important patent, from the cotton gin of Whitney "to the one under consideration, has been attacked by "the testimony of witnesses who imagined they "had made similar discoveries long before the "patentee had claimed to have invented his de- "vice, has tended to throw a certain amount "of discredit upon all that class of evidence, and to "demand that it be subjected to the closest scrutiny. In- "deed, the frequency with which testimony is tortured, "or fabricated outright, to build up the defense of a prior "use of the thing patented, goes far to justify the popular "impression that the inventor may be treated as the law- "ful prey of the infringer. The doctrine was laid down "by this court in *Coffin v. Ogden*, 85 *U. S.*, 120, that 'the "burden of proof rests upon him,' the defendant, 'and "every reasonable doubt should be resolved against him. "If the thing were embryotic or inchoate: if it rested in

"speculation or experiment; if the process pursued for its "development had failed to reach the point of consumma- "tion, it can not avail to defeat a patent founded upon a "discovery or invention which was completed, while in "the other case there was only progress, however near "that progress may have approximated to the end in "view."

In relation to the alleged anticipating devices testified to by defendant's witnesses, it is too evident to require discussion that complainant's expert witness stated the matter as it was when he said in answer to question 8; Record, page 24: "The device described does not em- "brace the combination of elements claimed in the pat- "ent, nor does it perform the same office or function as "the device shown and claimed in the patent, in substan- "tially the same way. The claim of the patent em- "braces a ring, for which there is no substitute or equiva- "lent in the device described, an elevated grating and "pins for supporting the grating, none of which are found "in the device described in the question."

While it is not incumbent upon the plaintiff to do so, in view of the exceeding remoteness of the alleged anticipating devices, still the complainant shows by the testimony of his witness Robinson at page 23 of the Record, the successful operation and utility of the grate in question. Witness says:

"For about four years I have had an opportunity to see "the operation of grates constructed in conformity with "the patent in suit. Such a grate is on the corner oppo- "site the front window of the office which I have occu- "pied for upwards of four years, and I have had during "that time repeated opportunities to see the practical "operation of the grate. On several occasions, during vio-

"lent rainstorms, in the city of Utica, I have seen the water "run down in the gutter in large quantities to the sewer "inlet, covered with a grate of the construction before "mentioned, and as the water approached the grate it "moved around the grate in a whirlpool and the larger "floating sticks moved out to the periphery of the circu- "lating water, while the water rushed into the space be- "tween the base ring and the grate with great velocity, "and on several occasions I have seen a quantity of water, "sufficient to cover not only the space between the grate "and the base ring, but to cover the grate itself, where "the whirlpool would continue; and after the water had "subsided, I have noticed the grate, and without excep- "tion, they have been left clean and free from rubbish or "debris, which would accumulate on a level or flat grate "and utterly obstruct the water from flowing into the "sewer."

In view of the positive evidence of the practical operation of this grate, it would seem that the learned Judge who decided this case, while taking into consideration "those things in prior use so well known that the courts "take notice of them without proof," should, also, have taken judicial notice of the fact that the "old sewer "grates" were liable to, and did, in fact, almost universally clog under a flow of water containing a comparatively large quantity of floating debris, and especially leaves, sand and grit, which beset sewer grates in the fall of the year when the trees are shedding their leaves.

As between the construction in question, in which the sewer grate is raised above the level of the gutter, and other sewer grates, in which the grate is on a level with the gutter, the improvement is in that particular combination of parts, and the construction of the whole, by

which the grate is elevated so as to permit the free passage of such matter as would otherwise accumulate upon, and cover, a sewer grate placed upon the level of the gutter or street, and would finally prevent the flowing of water.

Those changes in an article which have been held not to be invention, are such as would, or might, naturally, be made by any skillful mechanic in reproducing that which was old, and on which the changes are the natural outgrowth of an effort to turn out a better article, in a commercial sense.

The rule does not cover cases where there is a construction or device which is substantially different from that previously produced, as is the case in this instance.

Walker on Patents, §62.

Where there is a substantial difference in the construction, even though the functions are the same, there is room for a valid patent.

Walker on Patents, §62.
O'Reilly v. Morse, 15 *How.* 62.

The utility of this grate must be assumed from the fact that the defendant appropriated it bodily, and used it. The utility is also proven.

The grate is novel, for it differs materially from the old surface grates, and from everything set up as an alleged anticipation by the defendant's proofs.

Where utility and novelty exist, and changes in construction are introduced, which result in a different mode of operation, there is invention and patentability.

Cases cited above and *Keystone Mfg. Co. vs. Adams, U. S. Supreme Court*, decided January 8, 1894.

Knapp vs. Morse, 150 *U. S.*, 219.

Topliff vs. Topliff, 145 *U. S.*, 156.
Grady vs. Main Belting Co., 143 *U. S.*, 587.
Sessions vs. Romadka, 145 *U. S.*, 29.
Parks vs. Booth, 102 *U. S.*, 96.
Smith vs. Goodyear D. V. Co., 93 *U. S.*, 486.
Seymour vs. Osborn, 78 *U. S.*, 516.
Shirley vs. Sanderson, 8 *Fed. Rep*, 905.
Wilson vs. Coon, 6 *Fed. Rep.*, 623.
Dunbar vs. Albert Field Tuck Co., 4 *Fed. Rep.*, 543.
Strowbridge vs. Lindsay, 2 *Fed. Rep.*, 692.

IV.

This complainant has a right to maintain this action, being absolute assignee of a definite territory.

Waterman v. Mackenzie, 138 *U. S.*, 252.

Lastly.

The patent being found valid, there can be no doubt of the infringement.

See Complaint's two model Exhibits and the proof in relation to them, at pp. 16, 17, of the Record. (These models are in possession of this court.)

The decree of the Circuit Court should be reversed with costs, and the cause remanded, with directions to enter a decree for the appellant for an accounting and for damages, as prayed in the bill of complaint, with costs, and to take such further proceedings herein as shall be in conformity with law and with the opinion of this Court.

Dated Utica, N. Y., September, 1894.

EDWIN H. RISLEY,
Of Counsel for Appellant,
Herald Bldg., Utica, N. Y.

152-342

Office Supreme Court U. S.
FILED.
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JAMES H. McKENNEY,
CLERK.

SUPREME COURT

OF THE

UNITED STATES.

CYRUS F. PALMER, APPELLANT.
vs.
THE VILLAGE OF CORNING.

137

DEFENDANT'S BRIEF.

Appeal by Cyrus F. Palmer from a decree of the Circuit Court for the Northern District of New York, dismissing a bill in equity brought by him as the assignee of Henry W. Clapp, for the infringement by defendant of a patent issued to said Clapp January 21, 1873, No. 134,978 for an "Improvement in gratings for sewer inlets."

The defendant by its answer denies the validity of the patent for want of novelty and invention, and also denies infringement. The answer of the defendant further alleges that the patent is void, in this, that the same purports to be granted for a new and useful improvement in grates for sewer inlets,

and does not specify wherein such improvement consists, and it does not specify what is new, and that the claim embraces all, and all forms of grates for sewer inlets, and contains no disclaimer of any part thereof not invented or discovered by the patentee. It also sets up affirmatively that the grates for inlets in use in the village of Corning were not made or used by the village, but were procured and were and are used by the Board of Sewer Commissioners of the village of Corning under and by virtue of an act of the Legislature of the State of New York having exclusive power, control and authority over the same, and that the village had and has at no time any control, power, or authority in any way to prevent or interfere with the use of said grates for sewer inlets. Answer pages 7–8 of the record.

The bill was properly and rightly dismissed by reason of defective specification and claim on which the patent was granted, and for want of invention and novelty, grounds forcibly and concisely expressed in the memorandum filed by the Circuit Court (page 48 of the record.)

I.

The patent in question is invalid on its face.

1. The claim is "The grating for sewer-openings herein described, consisting of the ring A, supporting pins B, and elevated grating, substantially as specified."

The specifications after stating that "I, Henry W. Clapp, having invented certain improvements in gratings for catch basins and sewers," describes the same as follows: "My improvement consists in the employment of a device to elevate the grating above the opening which it covers a short distance."

What follows this part of the specifications, namely, "so that it will not become obstructed by small sticks," etc., "and at the same time will stop all matter large enough to do injury to the drain," is a mere statement of the function, or operation of the device.

Then follows the further statement "My improvement may be attached to any form of grating, round or square; and consists of a cast-iron ring made to fit the collar which surrounds the opening to hold the grate in place, marked *A*. in the drawing, in which I set the cast or wrought iron pins marked *B*. in the drawing, to which the grating is firmly attached and by means of which the grating may be elevated one or two inches, as may be desirable."

It therefore appears that while the specification is for a device to elevate the grating, consisting of a cast-iron ring and pins, the claim includes not only these, but also the elevated grating itself. The claim is broader than the specifications.

2. In the specifications, grates for sewer inlets are recognized as previously in use without regard to form. In the *claim* they are included in the alleged invention of the patentee, and as an element or part of his invention, which they surely are not, whether regard be had to the specifications or to common knowledge and observation. If complainant is not now insisting upon being owner of a patent which includes the grate as the invention of the patentee, he should have filed a disclaimer.

R. S. Sec. 4917. 4922.

3. The *claim* is not for a combination of elements, for the invention is not specified as a combination. It is not for an improvement, for it does not particularly point out and distinctly claim the part or im-

provement, which the patentee claims as his invention or discovery.

R. S. Sec. 4888.

Walker on Patents, Sec. 116. 117.

Phillips vs. Page 24 How 164. 167–8.

White vs. Dunbar 119 U. S. 47. 51–2.

Howe Machine Co., vs National Needle Co., 134 U. S., 388, 394.

Holmes vs. London etc., Railway Co., 16 Eng. Law and Eq. 409.

Clark vs. Adin, 19 Eng. Rep. 132.

The head note of this case expresses the rule of our statute upon this point,—"when a person has invented an improvement in the form of a particular apparatus or machine, but combines that individual improvement with other things which are not his invention, his specifications must claim that particular individual thing, and not leave it doubtful whether the claim is made for the whole combination of which that thing only forms a part."

4. The *claim* is what defines the invention, and it can neither be enlarged, restricted or qualified by reference to the specifications.

The language of the courts is: "The scope of letters patent must be limited to the invention covered by "*the claim*," and while the claim may be illustrated, it cannot be enlarged by language used in other parts of the specification."

Yale Lock Co., vs. Greenleaf, 117 U. S. 559.

Rail Road Co., vs. Mellon, 104 U. S. 118.

5. In the specification, the invention is alleged

to consist of the employment of the device to elevate this grating above the opening which it covers, by means of pins set in a cast-iron ring, and the device is described by specifying its particular parts, and reference to a drawing in which they are represented. The device is neither novel nor requires invention. It is old and is seen everywhere in superstructures supported by pillars or columns resting on a base or foundation. It is therefore a matter of common knowledge of which courts take judicial notice.

Brown vs. Piper, 91 U. S. 41.

Slawson vs. Grand St. R. R. Co., 107 U. S. 649.

King vs. Gullan, 109 U. S. 99–101.

Aron vs. Manhattan R. Co., 132 U. S. 84–88.

6. The device described in the specifications involves no invention. It scarcely requires ordinary mechanical skill, and would occur to the most unskilled person.

Vinton vs. Hamilton; 104 U. S. 491.

Yale Lock Co., vs. Greenleaf, 117 U. S. 554–559.

Atlantic Works vs. Brady, 107 U. S. 199.

King vs. Gullan, 109 U. S. 99.

Phillips vs. Detroit, 111 U. S. 604–607.

Hollister vs. Mfg. Co., 113 U. S. 59.

Buck vs. Heermance 1 Blatch 398.

Brown vs. Dist. Columbia, 130 U. S., 87.

Pomace Holder Co., vs. Ferguson, 119 U. S. 335.

7. If it is claimed that the patent covers the operation of the space left by elevating the grate, through which leaves, etc., will pass freely and the

grate be left free for the passage of water, it is enough to say that this is nothing more than the result or function of the device specified, which is not patentable.

Corning vs. Burden, 15 How., 267.

And the same is true of the purpose or object of the device in question—to prevent obstruction by small sticks, etc., and at the same time stop all matter large enough to do injury in the drain.

Knapp vs. Morss 150 U. S., 221. 227.

Walker on Patents. Sec. 5 and cases cited, and it is apparent that all apertures for the passage of water, produce the same result, the efficiency of operation depending upon the size of the aperture. A patent for a new and useful hole is lacking in invention.

Walker on Patents, Sec. 25.

8. The addition of lateral spaces to vertical openings, for the passage of water does not bring the device in question within the domain of invention. It produces only an aggregation of parts, each part performing independently the same function as it performed before, and producing no new result attributable to the joint action of the several parts.

To illustrate: in a surface grating in the same plane with the gutter, the vertical openings as matter of common observation admit smaller, and exclude larger floating substances, according to the size of the openings. Lateral openings produce precisely the same results. The same force of gravitation causes the water to fall into the inlets, and carry with it floating substances small enough to be admitted, and the same resistance operates to arrest the passage of larger substances in one case

as in the other. It is obvious that the combined operation of the lateral, with the vertical openings, produces no different result. The only consequence. if any, is increased capacity.

Hailes vs. Van Wormer, (20 Wall, 353, 368,) in which it is said: "The results must be the product of the combination, and not the mere aggregate of several results, each the complete product of one of the combined elements. Combined results are not necessarily a novel result, nor are they an old result obtained in a new and improved manner. Merely bringing old devices into juxtaposition, and then allowing each to work its own effect, without the production of something novel, is not invention."

Reckendorfer vs. Faber, 92 U. S. 347–357. "The combination to be patentable, must produce a different force or effect, or result, in the combined forces or processes, from that given by their separate parts. There must be a new result produced by their union; if not so, it is only an aggregation of separate elements."

Pickering vs. McCullough, 104 U. S. 310.

Burt vs. Evory, 133 U. S. 349, 358–59.

"A change only in form, proportions, or degree, the substitution of equivalents, doing substantially the same thing in the same way, by substantially the same means, with better results, is not such invention as will sustain a patent."

Knapp vs. Morss 150 U. S. 221, 227.

II.

The alleged invention is destitute of novelty.

1. Sewer grates are, by the specifications, recog-

nized as already in use. Lateral spaces left open by means of perpendicular slats to allow the passage of water, and at the same time stop floating substances, have long been known and used in mill flumes or races, and in ditches.

Evidence of Francis E. Young, Warren S. Hodgman, pages 41-44; Hiram Pritchard, pages 45-47 of the record.

2. The only evidence of the operation of the grate in question, is that of the complainant, (page 15, A 11, pages 18 X. Q., 36 X. A., 36 X. Q., 37 X. A., 37 X. Q , 39 X. A., 39), which is purely theoretical and not intended to be given from observation, and that of Milton E. Robinson, (pp. 21-27, 4 Q. A., 5 Q. A., 6 X. Q. A., 7 X. Q. A., 12 X. Q. A., and remainder of Robinson's evidence.) The substance of the evidence is to the effect that the patented grate performs its functions in a better manner than a grate in a uniform plane with the surface of the gutter, and not that it produces any new result. This clearly appears from the answer of this witness to X, Q., 17, (p. 26.)

Q. Does not the effect produced depend more upon the larger horizontal or lateral opening in the grate in question, than in the vertical opening?

A. I cannot say either way from my observation. because I have never seen devices constructed as the question implies.

3. The evidence of Robinson will be searched in vain for proof of any joint action of the different elements of the grate in question, which is not attributable to the separate action of each. It is not found in the whirlpool action of the water as testified to in answer to Q. 5, (p. 23) or the answer to X. Q., 7, (p. 25) or X. Q., 15, (p. 26.) Briefly, the same

result is produced by a grate with vertical as with lateral openings, or if there is any difference, it is only in degree. This is so obvious as to require no proof. Either will prevent the passage of articles of greater dimensions than the openings, and admit those which are smaller.

4. The opinion of Robinson upon various matters testified to by him was not competent, but whether competent or not, is entitled to no weight. The matters upon which the opinions are given are not the subject of expert testimony. The questions are simply those of fact, from which the Court is competent to draw the proper conclusions without the aid of opinions.

Walker on Patents, Sec. 448, 449, 450.

Waterbury Brass Co., vs. N. Y. Brass Co., 3 Fisher 54.

Corning vs. Burden, 15 How. 252, 270.

Ferguson vs. Hubbell, 97 N. Y., 507.

5. The Clapp patent consists merely in a change of the form of grate previously in use. The model exhibited, and the drawing, represents the grating as arched, which, according to the specifications, may be of any form. Suppose the arch to be a semi-circle, with spaces at the base of the arch, of sufficient capacity to exclude the larger, and admit the smaller substances, this would hardly be held an infringement of the Clapp patent. The grate in use in the Village of Corning differs from the one supposed, only in the form of the arch, springing from the base perpendicularly, and then forming a segment of a circle.

McCormick vs. Talcott, 20 How. 402, 405.

"If the invention claimed, be itself but an im-

provement on a known machine by a mere change or combination of parts, the patentee cannot treat another as an infringer, who has improved the original machine by the use of a different form or combination, performing the same functions."

III.

With the exception of some twenty grates, the Village of Corning has not used those embracing the elements of the Clapp patent, and is not chargeable with infringement, if at all, in the use of any beyond that number.

1. The sewers were constructed by and under a Board of Sewer Commissioners, created by Chap. 94, (p. 176,) of the Laws of New York, of 1886, whereby it is among other things provided:

Section 1. Charles C. B. Walker, Quincy W. Wellington, Thomas Dwyer, Henry P. Sinclaire and Frank D. Kingsbury are hereby appointed Commissioners of Sewerage in the Village of Corning. * * *

The commissioners above named, and their successors in office, shall constitute and be known as the Board of Sewer Commissioners of the Village of Corning. * * *

§ 3. The commissioners shall have the exclusive power and authority to adopt plans for, and to construct a system of sewerage in and through the streets and alleys of the Village of Corning, and have the maintenance and management thereof. * *

§ 8. All contracts for the work and materials for construction, and repairs of the sewers, shall be made by and in the name of the Board of Sewer Commissioners. * * *

This Board is entirely independent of the Village,

and of its officers, and its control of the sewer is exclusive.

Defendants' evidence, (page 35 of the record.

2. Under the statute referred to, the sewers were constructed by contract, which included the sewer grates according to plans prescribed by the engineer in charge. It does not appear that the Village in its corporate capacity derives any benefit from the sewers. Presumably they are for the benefit of the owners of the property along which they pass.

Matter of John Loader, 89 N. Y. 548.

Defendant's evidence, (p. 37 of the record.)

3. The Board of Sewer Commissioners, under whose authority the sewers were constructed, being an entirely independent body, in no way subject to the control of the Village or its officers, the defendant is not liable for its acts.

Ham vs. Mayor of N. Y., 70 N. Y. 459.

Tone vs. Mayor of N. Y., 70 N. Y. 154.

Maxmilian vs. Mayor of N. Y., 62 N. Y. 160.

Heiser vs. Mayor of N. Y., 104 N. Y. 64.

Allen vs. City of Brooklyn, 8 Blatch 535.

Allen vs. City of New York, 17 Blatch 350.

The decree of the Circuit Court dismissing the bill of complaint should be affirmed.

GEO. T. SPENCER,

Of counsel for defendant.

Corning, N. Y.